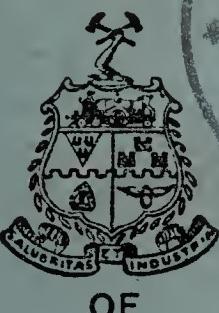


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Borough OF Swindon.



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1935

AND THE

Isolation Hospital Annual Report

From the 1st April, 1935, to the 31st March, 1936,

BY

(DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.)

REPORT

OF THE

CHIEF SANITARY INSPECTOR

FOR THE YEAR 1935.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR 1935.

TABLE OF CONTENTS.

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PUBLIC HEALTH REPORT.

	Page
Public Health Committee and Maternity and Child Welfare	
Sub-Committee	1
Staff	2
Introduction	5
General Public Health and Sanitation of the Town	
Swimming Pools	9
Housing	11
Nutrition and Inspection and Control of Foodstuffs	11
Hospital Situation	12
Maternity and Child Welfare—	
Maternity Home Statistics	14
Extern Midwifery Dept.	16
Maternity Clinics—Ante-Natal Work	16
Inspection of Midwives and Nursing Homes	26
Puerperal Pyrexia	28
Maternal Deaths	28
Ophthalmia Neonatorum	28
Pemphigus Neonatorum—Special report	32
Children Acts, 1908 and 1932	41
Health Visiting and Infant Welfare work	42
Milk (Mothers and Children) Order	43
Infantile Mortality and Stillbirths	46
Infection and Epidemiology—	
Epidemiology	54
Diphtheria	54
Scarlet Fever	56
Pneumonia	56
Acute Infections of the Nervous System	58
Measles and Whooping Cough	58
Tuberculosis	59
Cancer	59
General Observations on Vital Statistics	59

Diphtheria Immunization	....	....	....	....	61
Isolation Hospital Annual Report—					
Introduction	....	....	....	....	64
Ambulance Service	....	....	....	....	64
Hospital Service	....	....	....	....	65
Diphtheria	....	....	....	....	67
Pneumonia	....	....	....	....	68
Puerperal Morbidity	....	....	....	....	69
Scarlet Fever	....	....	....	....	69
Return Cases	....	....	....	....	72
General Statistics—					
Extracts from Vital Statistics	....	....	....	....	74
Infectious Disease Tables	....	....	....	....	75
Tuberculosis Tables	....	....	....	....	77
Comparative Vital and Mortality Statistics	....	....	....	....	81
Registrar-General's Official Table of Causes of Death	....	....	....	....	82
Infant Mortality	....	....	....	....	83
List of Hospitals provided or subsidised	....	....	....	....	84
List of Clinical Treatment Centres	....	....	....	....	85
Ambulance Facilities	....	....	....	....	86
List of Local Acts, Local Orders and General Adoptive Acts	....	....	....	....	86
Report of Chief Sanitary Inspector	....	....	....	....	87

SCHOOL MEDICAL REPORT.

Education Committee	....	....	....	....	108
Staff	....	....	....	....	108-9
General Statistics	....	....	....	....	110
Report of School Medical Officer	....	....	....	....	111
The Orthopaedic Scheme	....	....	....	....	121
Report of School Dental Surgeon	....	....	....	....	123
Report of Ophthalmic Surgeon	....	....	....	....	125
Report of Aural Specialist	....	....	....	....	125
Elementary Education Statistical Tables	....	....	....	....	127
Higher Education Statistical Tables	....	....	....	....	151

BOROUGH OF SWINDON.

Health Committee.

Chairman—Alderman S. E. WALTERS

Vice-Chairman—Councillor Mrs. S. ANDREWS

Members.

THE WORSHIPFUL THE MAYOR (Alderman Mrs. M. GEORGE).

Alderman T. MANNING	Councillor F. E. AKERS
„ L. J. NEWMAN	„ R. GEORGE
„ A. H. WHEELER	„ A. SNOW
„ A. E. HARDING	„ Mrs. E. M. SIMPKINS
Councillor M. ASHBY	„ G. H. SELMAN
„ MRS. L. E. WHITE	„ F. E. ALLEN
„ G. H. HUNT	„ W. SEATON

Maternity and Child Welfare Sub-Committee.

Chairman—

THE WORSHIPFUL THE MAYOR: Alderman Mrs. M. GEORGE.

Members.

Alderman T. MANNING

Councillor Mrs. E. M. SIMPKINS

„ L. J. NEWMAN

„ G. H. SELMAN

„ S. E. WALTERS

„ F. E. ALLEN

„ A. H. WHEELER

„ W. SEATON

„ A. E. HARDING

Miss K. J. STEPHENSON

Councillor M. ASHBY

Miss D. P. CHAPPELL

„ Mrs. L. E. WHITE

Mrs. ARNOLD FORSTER

„ G. H. HUNT

Mrs. WESTON

„ F. E. AKERS

Mrs. SCHMITZ

„ Mrs. S. ANDREWS

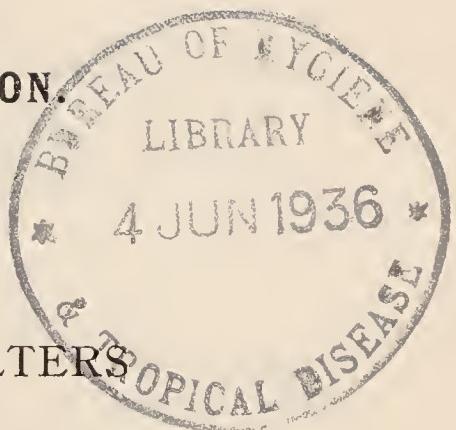
Miss I. F. MOORE

„ A. SNOW

Mrs. L. E. FRY

„ R. GEORGE

Town Clerk—W. H. BENTLEY, Esq.



BOROUGH OF SWINDON.

PUBLIC HEALTH DEPARTMENT.

STAFF.

Medical Officer of Health, School Medical Officer and Medical Superintendent of the Isolation Hospital and Maternity Home.

DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Deputy Medical Officer of Health.

V. R. WALKER, B.Sc., M.B., Ch.B., D.P.H.

Assistant Medical Officer of Health.

VIOLET REDMAN KING, M.B., Ch.B.

Chief Sanitary Inspector.

F. H. BEAVIS.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Certificate in Building Construction.

Assistant Sanitary Inspectors.

H. A. BANWELL.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Certificate of the Worshipful Company of Plumbers and Final Certificate City and Guilds.

Certificate in Hygiene.

R. N. HUGHES.

Certificate of the Royal Sanitary Institute and Sanitary Inspectors Examination Joint Board.

Certificate of the Royal Sanitary Institute for Meat Inspection.

Liverpool University Certificate in Meat and Food Inspection.

Liverpool University Certificate in Sanitary Science.

F. R. G. SELWOOD.

Certificate of the Royal Sanitary Institute.

Certificate of the Royal Sanitary Institute for Meat Inspection.

*Temporary Assistant Sanitary Inspector, appointed to carry out
1935 Housing Act.*

G. E. WILLIAMS.

Certificate of the Royal Sanitary Institute and Sanitary Inspectors Examination Joint Board.

Associateship Examination of the Royal Sanitary Institute.

Liverpool University Certificate in Meat and Food Inspection.

Liverpool University Certificate in Sanitary Science.

Head Clerk—S. MANSFIELD DEE.

Senior Clerk Public Health Service—W. M. WATTS.

Senior Clerk School Medical Service—J. W. DAY.

Assistant Clerks—

W. H. PAUL.

A. M. R. JONES.

D. A. OWEN.

PUBLIC HEALTH DEPARTMENT.**STAFF—Continued.**

Clinical Clerks—Miss. G. L. NORRIS, Miss E. M. KEY.

Matron of the Isolation Hospital.

Miss J. MCKINNON SMITH, A.R.R.C.

Matron of the Maternity Home and Training Centre.

Miss F. R. SILLICK.

Health Visitors and School Nurses.

Miss M. EVANS

3 years Certificate of Hospital Training.

Queen's Nurse.

Certificate of Central Midwives Board.

Health Visitor's Certificate of the Royal Sanitary Institute.

State Registered Nurse.

Mrs. K. M. D. FRANCIS.

3 years Certificate of Hospital Training.

Certificate of Central Midwives Board.

Health Visitor's Certificate of the Royal Sanitary Institute.

State Registered Nurse.

Miss A. HAWKINS.

4 years Certificate of Hospital Training.

Certificate of the Central Midwives Board.

Health Visitor's Certificate of the Royal Sanitary Institute.

State Registered Nurse.

Miss O. MARKER

4 years Certificate of Hospital Training.

Certificate of the Central Midwives Board.

Health Visitor's Certificate of the Royal Sanitary Institute.

State Registered Nurse.

Miss E. M. PILCHER.

3 years Certificate of Hospital Training.

School Nurse's and Health Visitor's and Tuberculosis Certificate.

Certificate of the Royal Sanitary Institute.

State Registered Nurse.

Miss I. D. SAMPSON.

3 years Certificate of Hospital Training.

Certificate for Tuberculosis (Royal Chest Hospital, London).

Queen's Nurse.

Certificate of the Central Midwives Board.

State Registered Nurse.

Needlework Demonstrator—Miss M. JOBSON.

*Disinfecto*r—A. C. MOLE.

Rat Catcher—S. F. WAKEFIELD.

Voluntary Helpers at Maternity Centres.—

Mrs. E. SCHMITZ

Mrs. OSMOND

Mrs. CHAPMAN

Mrs. SANDILANDS

LIST OF CONSULTANT & SPECIALIST STAFF

MATERNITY DEPARTMENT.

Obstetricians on the Rota :

- J. HOLLAND, M.B., B.Ch., B.A.O.R.U.I.
- S. McDERMOTT, M.B., B.Ch.
- S. J. C. MACKAY, M.B., Ch.B.
- M. BEHR, M.R.C.S., L.R.C.P. (Lond.).

Honorary Consulting Physician :

- T. P. BERRY, M.D. (Lond.), M.R.C.S., L.R.C.P.

Consulting Surgeon :

- J. EWART SCHOFIELD, F.R.C.S. (Eng.), M.B., Ch.B.

Consulting Obstetrician :

- A. W. BENNETT, M.R.C.S. (Eng.), L.R.C.P. (Lond.)
-

Ophthalmic Surgeon :

- OLIVER B. PRATT, M.A., M.B., B.Ch., D.O. (Oxon), M.R.C.S
L.R.C.P.

Surgeon for Nose, Throat and Ear Diseases :

- F. COURtenay MASON, B.A. (Lond.), M.S., M.B., B.S., F.R.C.S
(Eng.)

Orthopaedic Surgeon :

- M. F. FORRESTER BROWN, M.D. (Lond.) M.S.

Cardiologist :

- C. E. K. HERAPATH, M.D. (Lond.), M.B., B.S., M.R.C.S., L.R.C.P.
(Lond.)

Honorary Consultant for Nervous and Mental Diseases :

- J. F. W. LEECH, M.D., M.B., B.Ch., B.A.O., D.P.M., R.C.P.S.I.

To the Chairman and Members of the Health etc., Committee.

LADIES AND GENTLEMEN,

In common with that of most parts of the civilized world, the health of Swindon in 1935 was more favourable than in any year of which we have reliable records, and coming at the end of a series of years, each of which was better than, or as good as, its predecessor, we are naturally hopeful that the war against ill-health is going progressively in our favour. But it is well to realize that though part of the improvement of recent years is genuine and does connote permanent victory over our worst enemies, part of it is ephemeral and fortuitous due to a combination of circumstances which shortly will cease to operate, to be replaced by a state superficially unfavourable to human survival, producing an accelerating death rate and a progressive fall in the population.

The object of preventive medicine is to destroy adverse environmental influences which favour conditions lethal to man, especially during his ages of development. In this its success has been undeniable. The purification of our water supplies has abolished water-borne disease; improved feeding of the people has reduced to manageable proportions ill-health resulting from ill-nutrition, and the care given to children ensures the quick reversal of adverse factors, which, though apparently trivial in themselves, cause progressive deterioration of the powers of survival. More recently we have discovered that in the complex struggle for existence to which all organic beings are subjected in their endeavours for ascendancy, we can weight the balance in favour of man and by artificial aids, learned from the natural struggle itself, defeat those organisms which win against us in a fair fight. By these means we upset the balance of nature and give to man a capacity to carry through which nature unassisted denies him. This, though highly favourable to us in increasing our hold over life, in freeing us from many of our most formidable diseases and making our health more reliable, leads to disadvantages which might have been foreseen—were indeed foreseen by those who are capable of foreseeing anything—but which are not generally understood and frequently misrepresented. Amongst wild animals, chronic disease and decrepitude from age are rarely found; not as some would have us believe, because they live healthily and naturally, but because as soon as their vigour fails they are incapable of sustaining the struggle for existence and either die rapidly from starvation, or more rapidly still at a banquet which they themselves provide. In the wild, the life of a lion is ten years, in captivity it is thirty. Is it any wonder that wild lions are healthy and vigorous whereas those in cages are often lazy, mangy and diseased? Acute (parasitic) disease is quite

common in wild animals and generally more lethal than in man, for a sick animal is not protected from his enemies, whereas man when he is sick is protected (even from his creditors) and therefore has much greater chance of returning to health. This protection must of necessity produce a great number of survivors who are crippled, or damaged and these will not have the health of their more fortunate colleagues. So our success in combatting lethal disease has to be paid for in an excess of aged and damaged units in our population, the continued life of whom is largely dependent upon hazard.

The advancing average age of the population which has come about from a rapidly collapsing birth rate, suppression of fatal disease amongst the young and a low death rate amongst the aged due to continued favourable factors during the past few years, must shortly cause an increase in the death rate, for though the expectation of life has been increased, there is little likelihood of its being increased much further. There are signs that the fall in the birth rate has been stemmed and presuming it has become stabilised we may look for an increased death rate, shortly equalling the birth rate and then exceeding it, until our population has sunk to that level which can be maintained by a birth rate of about 15 based on present population and an expectation of life of about 60 years. For certain we must expect the next fifty years to show an increased mortality, but also increased freedom from parasitic disease and general improvement in health of those below middle age.

I am quite sure that we shall overcome all those causes of sickness which can be overcome by the full exercise of the powers we possess, or which further research may give us, but I see no warrant whatever for supposing that we can prolong human life indefinitely or that we can overcome the infirmity of age. It seems to me that the favourable interpretation which some have placed on experiments in tissue culture and the results of researches into endocrine functions, indicating the possibility of rejuvenation, is biologically unsound, though I am prepared to admit that they do offer a hope that we may arrange human ageing to be more regular and so diminish the numbers which die from irregular deterioration of their organs.

There is a temptation, with the close of the Georgian era, to write a review of the development of the public health services during that period : for, in truth, of the progress made we may be justly proud. But we know that pride goeth before a fall and I have the uneasy feeling that whilst gently patting each other's back for successes gained, we may expose ourselves to more violent concussions from our failures.

Of the three major enemies of mankind—famine, pestilence and war—we are able, in theory, to abolish the first, to limit the second and are ready to attack the third. Though public health is obviously concerned with pestilence and, of recent years, has shown its power to deal with famine, it is not so clear that it has anything to do with war. Yet apart from the fact that the subjugation of famine removes the main excuse for war, the rise of practical psychology may lead to the subjugation of fear which is the parent of strife. Two secondary enemies—in reality they are but one—are failure of potential vitality and senility. The potential individual life of all sexed beings is limited, so even those best endowed must eventually fade. This potential is extraordinarily variable—it may be too weak to ensure the development of the ovum or, if it be sufficient for this, be unable to withstand the shocks of birth, of development, of puberty, or of reproduction. Or it may rapidly succumb to the whips and scorns of time which harass all of us continuously. The potential may be distorted, leading to malformation early in life, or irregular ageing towards the end, the latter of which causes much disease and premature death in those past the meridian. We have no power over potential, save in eugenics, of which our knowledge is at present small and what we have we fail to utilize.

It must be realized that public health is but little influenced by what is popularly known as medicine. It is however dominated by human biology—or ought to be—for the biologist can tell us *what* man requires. It is for the economists and politicians to tell us *how* he can meet his requirements.

Though nature is sensational in her results, she is not sensational in her processes. In preventive medicine we seek to understand the moves which lead up to dramatic events, but the processes are far from dramatic. In the promotion of human health we gain little or nothing by the treatment of disease, for at the best this is merely a palliative. It can never be very successful even in its avowed object of restoring health to those who have lost it, because what we call disease is in reality not disease itself, but its end product. This does not refer to those acute diseases which are self-limited reactions. Here, improvements in treatment will do much to keep them within the bounds of physiology, so that they neither kill nor permanently damage us. But for those diseases which are not self-limited, for the results of long-continued adverse factors which produce structural alterations of a permanent character, or which call for mechanical interference to preserve life, the future can give us little more than the past.

There are social and economic reasons why we pay so much greater attention to individual sickness than to public health,

why the pursuit of cure of disease is prosecuted so much more vigorously than the pursuit of prevention. But more important still is the absence of sensation which characterizes all real preventive work. It appeals to the intellect and not to the emotions and so fails to excite enthusiasm. The warrior, whose business is to destroy life, is loaded with honours, the physiologist, whose business is to save life, remains unknown. We had an interesting example of this in March 1936, when on nearly the same day died our most popular admiral and the greatest physiologist of the twentieth century. The politician has a more honoured calling than the dustman, but it is far less useful, for we know that if the politicians shut up for six months we should all breathe more freely, whereas if the dustman did, we should not be able to breathe at all. But to complain, as we often feel inclined to do, that the struggle for prevention is an up-hill game for which the public will not supply adequate funds and in which nine persons out of ten take little interest, is to complain of the level of human intelligence. Such complaints are futile and are indeed less excusable to-day than in the past, for the public does pay some attention to prevention and as it becomes better acquainted with the objects and methods of prevention, it pays more. The advance in education, particularly the generalization of education in the elements of science, is slowly but surely enabling the majority of mankind to appreciate the real object of scientific inquiry. To the uneducated, science is a mysterious business which sometimes leads to sensational discoveries and inventions. Actually it is nothing of the kind, but a laborious method of getting at the truth ; clarification rather than discovery is its object. Strictly speaking, it invents nothing for all that it studies is already there, always has been and is unalterable. Nothing in science is more laborious than the clarification of the factors which influence health. Human environment is so complex, man himself is so complex and his powers of modifying himself to suit altered situations so great that it is only by prolonged observation and experiment, constantly evaluated, that we ever approach the truth. This, however, is no excuse for not using the truth when we have got it. Here indeed we may justly complain ; but let us be sure that the fault does not lie with those who are able to use the truth.

The promulgation of the truth, or what one honestly believes to be the truth, is an unpleasant duty, receiving more kicks than ha'pence and leading to martyrdom, which in these days, when sinners are many and saints are few, is a crown not sought with enthusiasm. True, in the twentieth century, none need fear the stake or the axe, but there are other less drastic unpleasantnesses from which we are not protected. We all hate to be robbed of our traditions and are not grateful to those who give us a new truth for an old falsehood ; nor do the falsehood merchants con-

template unemployment with equanimity. Those who promulgate the truth suffer the material disadvantage that they have nothing to gain, whereas those they oppose have much to lose. Let us give a specific instance. We know sufficient of the physiology of alimentation to educate the people to live so that they escape constipation. But as millions are made from constipation, the purveyors of pills and potions are little likely to see their trade swept away without a struggle and their immense profits enable them to influence both Press and Parliament. They have but one enemy, Public Intelligence, and this they know full well, is little to be feared. In some ways we are to blame in not bringing to the people the fruits of science in a form which is palatable. We cannot be sensational, for we must never depart from the truth and truth is an unemotional goddess ; but we can translate the language of science into the mother tongue and this can be vigorous enough to excite interest, if not enthusiasm. An optimist told us that we cannot fool all the people all the time, but public health requires that none of the people shall be fooled any of the time and the outlook for this is not hopeful.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Several changes occurred in the staff of the Medical Officer's Department during 1935. Dr. J. Stevenson Logan resigned on his obtaining the position of Deputy Medical Officer of Health to Southend-on-Sea. He left the service on 21-1-35 and in his place Dr. V. R. Walker was appointed, who took up duty on 14-2-35. In July Mr. Ernest A. Beasant left the service, also to take up an appointment in Southend. On his retirement the clerical staffs of the Public Health and School Medical Departments were combined and rearranged. Miss A. Hawkins, formerly employed as School Nurse, obtained her Health Visitor's Certificate in April 1935, and was automatically added to the list of health visitors and school nurses. The fusion of the Public Health and School Medical Departments is now complete.

GENERAL PUBLIC HEALTH AND SANITATION OF THE TOWN.

This being an ordinary report, it is unnecessary to refer to any matters connected with the general sanitation of the town, except such as were introduced or changed during the year under review. There is nothing to report, except a technical matter in connection with the Latton Water Works. For our purpose all that it is necessary to say about this is that the Latton water, though of excellent quality, suffered from turbidity, due to silica and iron. Expert advice was sought to overcome this trouble, but as the defect remedied itself, no action was required.

SWIMMING POOLS.

The swimming pool is a recent introduction. In Swindon we have had the swimming baths owned by the Great Western Railway Medical Fund Society since the dawn of the town's

history and for many years the Corporation has had Coate Water, but the small privately owned swimming pools are new. These pools are in the open air, sometimes natural puddles on a large scale, sometimes artefacts and sometimes a mixture of both. They give rise to several problems, of which two, the cleanliness of the water and the fitness, or otherwise, of the establishment including arrangements for towels and the supply of sanitary conveniences, etc., are of public health importance. We have no acceptable evidence of the spread of disease in this country either by the water, or by the towels, etc., of swimming pools, but in India pools are paramount in the spread of cholera and there is good reason to suppose that everywhere they might spread other diseases. They have been accused of doing so, but there is no proof that they have done so, though the risk must be admitted and should be avoided. We have no legal power over privately owned swimming pools and no standards which we might enforce, if we had power, but both proprietors and frequenters require some guarantee of safety and look to the public health department for guidance. There is no difficulty in formulating a code of rules to apply to swimming pools, nor would there be any difficulty in obtaining its acceptance except in regard to the purity of water, the standard to be attained and the means that should be employed to obtain it. We need some intelligent guidance on these matters. Swimming pools have come to stay, they will doubtless increase in numbers and should be encouraged, but they must not be a menace to health. We do not want to load them with unnecessary restrictions and cripple them by insistence on expensive plant to obtain an ideal, but we do want to know what standard of purity is essential and the cheapest and easiest way of obtaining it.

Apart from the baths, there are five swimming pools in Swindon, one owned by the Corporation and four privately. Analyses of the waters made last August revealed the following bacterial contents.

Pool No.	Total organisms growing on gelatine at room temperature	Organisms growing on agar at blood heat.	B. coli.
1	4,500	1,200	+ in 1 c.c.
2	11,500	3,900	+ in 1 c.c.
3	405,700	289,500	+ in 1 c.c.
4	358,700	119,400	+ in 1 c.c.
5	over 2,000,000	1,351,500	+ in 1/100 c.c.
Swindon Water supply.	28	0	0

All these pool waters would be condemned off hand for drinking purposes and as swimming water is occasionally imbibed by misadventure, it might be that we should insist upon the same degree of purity for it as we require for potable waters. Absence of *bacterium coli* might be insisted upon, for though this organism is harmless it is the measure of foecal pollution. Of all human parasites it is the most resistant, so if it is absent, freedom of important disease-producing germs may be assumed. It can be destroyed by filtration and chlorination ; so perhaps this method of treatment might be required of all swimming pools.

HOUSING.

During the year 243 new houses were erected in the Borough, 3 by the local authority and 240 by private enterprise. 3 houses were demolished. I do not intend to make any comment on the housing conditions in Swindon in this report, as there is not anything useful that can be added to what I have said in previous reports. To conform with the Housing Act, 1935, 1 temporary measurer and 3 temporary enumerators were appointed and these got to work towards the end of 1935. At the time of writing some information is available, but this will be more appropriately dealt with in the report for 1936. Until we had the Act of 1935 there was no feasible method of dealing with overcrowding, which actually, though small in extent, is the only serious housing problem in Swindon at the present time, apart from the question of rents which remains a very serious problem indeed.

NUTRITION AND THE INSPECTION AND CONTROL OF FOODSTUFFS.

We are responsible for the control of foodstuffs so far as their wholesomeness is concerned but not as regards adulteration, which is controlled by the Sale of Foods and Drugs Acts administered by the county council. In regard to the public health, the only sophistication of importance at the present day is tampering with milk and even this is becoming uncommon. The wholesomeness of foods is governed by the Public Health Acts administered by the borough. These Acts, if well administered, protect against diseased and unsound provisions, but they are not up-to-date and give us no power to prevent infection of food, which to-day is of more importance than unsoundness. The control of the milk supply is the most important detail of food inspection and here in Swindon we are lucky for we are in the centre of one of the great milk-producing areas. Our milk is subjected to frequent bacteriological examinations which reveal a general high level of purity and enable us to take action immediately in any case where the analysis is unsatisfactory.

A certain amount of meat is condemned as diseased, but in these days of quick transport and refrigeration, decomposed provisions give very little trouble. In insuring the proper nutrition of the people the only outstanding difficulties are price and the education of purchasers in relative values.

LABORATORY FACILITIES, HOME NURSING, CLINICS AND TREATMENT CENTRES AND AMBULANCE FACILITIES.

The only change of importance was the opening of the clinic in connection with the new Pinehurst school. This matter will be dealt with in the School Medical report.

THE HOSPITAL SITUATION IN SWINDON.

Negotiations pending for the amalgamation of the two general hospitals! They have been pending ever since I have been Medical Officer of Health. I did not see the beginning of them and I am not likely to see their end. But I might. For a new generation is springing up which shows evidence of having some energy and may put an end to the nonsense which from one generation to another obstructs our doing what our knowledge tells us we can do and our conscience that we ought to do. The position in Swindon is complicated by so many conflicting interests that the maximum benefit is not obtained for the expense and trouble involved in running its hospitals. It would be unfair to blame anybody personally, or any committee, for the delay in settling this important question. The real trouble is that there is nobody with a mind sufficiently large to force a passage and none of the committees that have dealt with the question has sufficient power to command an issue. An incident occurred in Swindon in the Autumn of 1935 which brought out the failure of our local hospital system. By the Grace of God the incident was a calamity rather than a catastrophe, but it did demonstrate that our present system is incapable of coping with those major troubles which we hope never to experience, but should always be ready to meet. In minor matters the existing arrangements are unsatisfactory. Everybody does his best and generally muddles through somehow, but all are working under disabilities which are quite unnecessary.

Maternity and Child Welfare.

ANNUAL STATISTICS RELATING TO THE MATERNITY HOME, 1935.

	Borough.	County.	Total.
(1) Number of cases in the Home on 1st January, 1935.	14	6	20
(2) Number of cases admitted during 1935	303	102	405
(3) Number of cases remaining in the Home on 1st January, 1936	15	4	19
(4) Average duration of stay	13.07	14.64	13.47
(5) No. of cases delivered by :— (a) Midwives (b) Doctors No. of cases in which no delivery took place	253 33 31	88 10 10	341 43 41
(6) No. of cases in which medical assistance was sought by the midwives		130	
(7) No. of cases notified as :— (a) Puerperal Fever (b) Puerperal Pyrexia		— *26	
(8) No. of cases of pemphigus neonatorum		See appendix.	
(9) No. of cases notified as ophthalmia neonatorum with result of treatment in each case		I not gonorrhreal, recovered completely	
(10) No. of infants not entirely breast-fed while in the Institution		11	
(11) No. of maternal deaths, with causes		†3 1 obstructed labour 1 eclampsia 1 nephritis of pregnancy	

* 11 only of these are notifiable under the Puerperal Pyrexia Order, 1926. Of these, 3 were removed to the Isolation Hospital, one of which died there. Another case, not notifiable under the Puerperal Pyrexia Order, also died in the Maternity Home. 3 of the pyrexia cases, one notifiable under the Order and two not, occurred in women who had been delivered before they were admitted to the Maternity Home.

† 2 patients who had been delivered in the Maternity Home died subsequently to discharge, one at home from abscess of the breast and one in the Isolation Hospital from scarlet fever.

**ANNUAL STATISTICS RELATING TO THE MATERNITY
HOME, 1935—Continued.**

(12) No. of foetal deaths :—

(a) still-born

(b) within 10 days of birth, showing the cause of death in each case, and results of post-mortem examination (if obtainable).

STILLBIRTHS 23.

7 macerated.

3 toxæmia of mother.

1 ante-partum haemorrhage.

1 was the third macerated stillbirth and

1 a second macerated still-birth of the same mothers, but no cause could be determined for these occurrences.

1 case was a 32 weeks foetus. No cause discovered for its death.

16 fresh—

2 were anencephaly.

3 toxæmia of mother.

3 placenta praevia.

2 difficult forceps operations.

1 mother had pyonephritis.

3 full-term, labour induced. No satisfactory explanation.

2 twins 30 weeks. No adequate explanation for their death.

DEATHS WITHIN 10 DAYS 13.

3 deformed, non-viable.

1 mother died of scarlet fever.

1 mother suffering from cyanosis and asthma. Child cyanosis.

Pair of twins. 30 weeks. Mother toxæmia.

One full pair of twins.

One of a pair of twins and One single infant. All born before the mother was admitted to Maternity Home. They were all premature.

1 infant 28 weeks. Died on the second day.

1 infant 30 weeks. Died on the seventh day.

These two deaths cannot be accounted for satisfactorily.

Of the 384 cases delivered in the Maternity Home, 37 were delivered by forceps, giving a forceps rate of 9.6% which is the lowest rate in the history of the Home and considering that the Homes accommodates the great majority of abnormal midwifery cases in Swindon and a large part of Wiltshire, this rate is satisfactory. Amongst the forceps cases there were 21 ruptured perineum, giving a rate of 56%. Among the 347 cases not instrumentally delivered there were 29 ruptured perineum, giving a rate of 8%, which is less than half the rate in any previous year. There was 1 Caesarean section and 5 inductions, all but one of which were subsequently delivered by forceps. These figures indicate a material improvement on any previous year.

EXTERN MIDWIFERY DEPARTMENT.

On the district there were 128 deliveries ; 5 were stillbirths, 2 abortions and in two the infant died. 2 cases were admitted from the Extern Department into the Maternity Home and a doctor was called in under the Midwives Acts in 31 cases. In 16 cases the Extern Staff acted in the capacity of maternity nurses to doctors' cases.

During the year 20 probationers were under instruction. Of these, 10 obtained the certificate of the Central Midwives Board.

REPORT OF WORK DONE AT THE MATERNITY CLINIC, 1935.

(By Dr. VIOLET KING, Assistant Medical Officer of Health.)

There has been some decrease in the number of mothers attending the Centre during the year. A smaller number of cases also, has been referred to the Consultant's Clinic, owing to the fact that now a doctor from the Great Western Railway Medical Fund Society attends one of the Milton Road Clinics and sees the mothers who may possibly require his services at confinement.

Of the mothers who had albuminuria, eleven showed it once, two twice, three three-times and one four-times. In four of these cases, the confinement resulted in a stillbirth. In one case twins were born, one of which died in one day, the other in four days. One of the mothers, with a dead baby herself, subsequently died.

Seven specimens of urine were sent to the Pregnancy Diagnosis Laboratory, five of which were found to be positive and two negative. These findings were afterwards confirmed on clinical examination.

The seven mothers were admitted to the Maternity Home pre-natally for the following reasons : two for toxæmia, one for persistent vomiting, one for rest and observation, one for cardiac disease, one for version and one for high-blood pressure, who was re-admitted at a later date for induction.

The neo-natal deaths were fewer, but there was an increase in the number of stillbirths.

There were two maternal deaths, details of which are in the tables.

V. REDMAN KING,
Assistant Medical Officer of Health.

STATISTICS RELATING TO THE MATERNITY CLINIC, 1935.

No. of Mothers attending the Maternity Centre	....	536
No. of attendances at Maternity Clinics	....	2715
No. of attendances at Consultant's Clinics	....	62
TOTAL	....	2777

Primigravidae	....	....	....	....	104
No. of cases referred to Consultant's Clinic	....	....	....	....	35
No. of cases referred to Dental Clinic	....	....	....	....	29
Specimens of urine tested	....	....	....	....	3471
Gynaecological and post-natal cases	....	....	....	....	18
Cases of suspected pregnancy	....	....	....	....	15
Admitted to Maternity Home from Ante-Natal Clinic	....	....	....	....	7
Deliveries elsewhere than in County of Wilts	....	....	....	....	11
Cases X-rayed	....	....	....	....	2
Wassermann tests	....	....	....	....	1
Aschheim-Zondek tests	....	....	....	....	7
No. of cases carried over into 1936	....	....	....	....	114
Results not known	....	....	....	....	4

Conditions found at Clinics :—

Albuminuria	....	....	....	....	17
Enlarged thyroid	....	....	....	....	12
Varicose veins	....	....	....	....	97
Anaemia	....	....	....	....	5
Otitis Media	....	....	....	....	1
Mentally Deficient	....	....	....	....	1
Pyorrhoea	....	....	....	....	5
Chorea	....	....	....	....	1
Ovarian cyst	....	....	....	....	1
Occupational Dermatitis	....	....	....	....	1
Rheumatism	....	....	....	....	3
Sciatica	....	....	....	....	5
Hernia	....	....	....	....	2
Prolapse	....	....	....	....	4
Epistaxis	....	....	....	....	4
Cardiac disease	....	....	....	....	3
Contracted pelvis	....	....	....	....	1

Confinement Results with Particulars :—

No. of deliveries	....	....	....	....	473
Of these :—					
Twins	....	....	....	....	5
Still-born, full time	....	....	....	....	9
Still-born, premature	....	....	....	....	4
Premature living	....	....	....	....	15
Induction	....	....	....	....	12
Forceps	....	....	....	....	40
Caesarian Section	....	....	....	....	1
Breech presentation	....	....	....	....	17
Posterior presentation	....	....	....	....	12
Ante-partum haemorrhage	....	....	....	....	5
Post-partum haemorrhage	....	....	....	....	10
Blood transfusion	....	....	....	....	1
Hysteria	....	....	....	....	2
Maternal deaths	....	....	....	....	2
Transferred to Gorse Hill Isolation Hospital	....	....	....	....	3
Abortions	....	....	....	....	5
Puerperal Pyrexia notifiable	....	....	....	....	16

Foetal Abnormalities :—

Extensive naevus	....	....	....	....	1
Cleft palate	....	....	....	....	1
Congenital cataract	....	....	....	....	1
Anencephaly and Meningocele	....	....	....	....	1
Hypospadias	....	....	....	....	1
Talipes and hypospadias	....	....	....	....	1
Spina bifida with deformed feet and genitals	....	....	....	....	1

The following table gives the details of confinements of women who had attended the Ante-natal Department, but in whom the child failed to survive :—

No.	Age.	Para	Visits	Details of Confinements.	Ante-natal and Previous History.
1	41	1	2	Emergency delivery in Maternity Home of County case. Tedious labour, forceps used. Macerated foetus. Post-partum bleeding. General condition rather poor. Oedema of legs. Cystitis.	Had booked a private midwife. Married 5 years, not well for last two. Scanty menstruation and increase of weight. Some indigestion and sickness at present. About 16 weeks pregnant on first visit. Not seen after 6th month.
2	28	1	11	Admitted to Maternity Home for induction. Three days later complained of headache and distress, followed by collapse. Forceps applied with rapid delivery of still-born baby, post mature. Flabby uterus, but no bleeding. Mother died within the hour. Post-mortem. Enlargement of heart, liver and gall-bladder full of stones. Disease of both kidneys, one of which was suppurating.	Mother had had ulcerative colitis with resection of bowel, followed by appendectomy. At time of first visit in Aug 1934 was being treated for 'pain in chest.' Height 5' 7½", weight 11 stone 3lbs. Varicose veins present and trace of albumin at first visit, then not again till 28-12-34. This was greatly increased at each of two subsequent and last visits in Jan. 1935. On 18-12-34 had headache and blood pressure of 170. Advised to come into Home, and was in four days, no albumin being found in the urine. Was feeling better at next ante-natal visit, but blood pressure 155. Three days later blood pressure 165, was passing very little urine and had swelling of the hands. Sent into the Home.

No.	Age.	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
3	39	3	5	Admitted to Maternity Home from County. Normal delivery of very large child. Artificial respiration not successful. Heart heard for one hour. ? Anencephalic and congenital cataract. Breech presentation.	No recorded ill-health of mother. Had had one still-birth in 1931 and an abortion in 1930. The former was a breech presentation. Well during pregnancy. Some hydramnios. Breech diagnosed before admission.
4	26	3	5	Confined on District. Premature macerated foetus, anencephalic breech.	Apparently healthy. Varicose veins right leg. Backache. Some cough and bad cold during 7th month. Foetal heart not heard ten days before delivery. Presentation not made out owing to tense abdomen.
5	32	2	12	Normal full-time delivery in Maternity Home. Anencephaly and meningocele.	No history of ill-health. 1st baby born 1926; forceps used and perineum ruptured. Did not unite after suture. During present pregnancy had haemorrhoids and frequency of micturition, also brownish vaginal discharge. Ankles swelled after walking. Foetus felt on several occasions to be lying obliquely or transversely. Sent to Consultant's Clinic and diagnosed as breech. Foetal heart clear two days before delivery.
6	25	1	4	County patient, delivered prematurely in Maternity Home of macerated baby. Normal labour.	Much discomfort from sore throats. Had a fall during the sixth month and no movement felt after. No foetal heart sounds heard at Clinic. Not sleeping well and worrying. Four days after last visit was admitted to the Home.

No.	Age.	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
7	16	1	3	Emergency admission from County into Maternity Home, for toxæmia. Albuminuria, oedema, sickness and headache. Casts present in urine. Normal delivery on 17th day.	Had had a tubercular abscess in one leg. On first visit to Clinic, blood pressure was 190/130, with albuminuria and she was admitted to the Maternity Home.
8	28	2	6	Admitted to Maternity Home with ruptured membranes and hydramnios. Ante-partum bleeding the following morning. Extended breech delivery.	Healthy mother. Varicose veins. Trace of albumin on two occasions, with oedema of legs and feet. Blood pressure 140 on last two visits. Presentation difficult to make out, diagnosed on various occasions as breech, vertex and twins.
9	30	4	4	Admitted to Maternity Home three days before delivery, for ante-partum bleeding. Albumin found in urine. Mother's condition poor. Delivered of macerated foetus. Pyrexia developed. Blood transfusion carried out. Later was transferred to Isolation Hospital.	Mother had good health. All babies large. Last born in 1932, weighed 10 lbs. $8\frac{1}{2}$ ozs. macerated. Appeared well during this pregnancy, save for pains in head and cramp.
10	21	1	2	Confined at home. Had booked one private mid-wife and was confined by another. No details known. Foetus was macerated.	A healthy mother. Had had pleurisy at 16 years. At the 7th month, the presentation and foetal parts were indefinite on palpation at Clinic and the foetal heart not heard. A month later the heart was heard.

No.	Age.	Para.	Visits	Details of Confinements.	Ante-natal and Previous History.
11	28	1	4	Admitted to Maternity Home with signs and symptoms of toxæmia and delivered the same day. Later developed notifiable pyrexia and was transferred to the Isolation Hospital.	Operation at 19 years, as she had never menstruated. Ovarian disease found. Left ovary removed and part of right also. Appendix removed and adhesions broken down the following year. Had also had scarlet fever. During pregnancy had vaginal discharge and varicose veins. Had one attack of epigastric pain and called in a doctor. Albumin in urine on 4th clinic visit; sickness, blurred vision, oedema and twitching. Blood pressure 175/135. Went into Maternity Home same day.
12	28	1	8	Admitted to the Maternity Home in labour which was tedious and ended in a difficult forceps delivery. The position had been posterior, but the baby was delivered as an L.O.A.	A healthy mother. Pneumonia in 1933. Was very well all through pregnancy. Sent to the Consultant's Clinic, position of baby confirmed as L.O.A.
13	20	1	9	Admitted to the Maternity Home in labour. No movements had been felt for two days. Membranes artificially ruptured and delivery of full-term macerated baby.	A healthy mother. Well during pregnancy save for an occasional headache and slight swelling of ankles.

Neo-Natal Deaths in relation to Ante-Natal Work, 1935.

No.	Age.	Para.	Visits.	Mother's History.	Confinement.	Infant's History.
1	19	1	6	An unmarried mother from the Institution. Mentally Defective. A healthy girl. Varicose veins in one leg. Well during pregnancy. Notifiable pyrexia after confinement. Removed to Isolation Hospital and died there.	Normal delivery in Maternity Home.	Baby weighed 6 lbs. 6 oz. Became cyanosed, with blood-stained mucus in mouth. Body heat could not be maintained. Died within 24 hours.
2	30	1	8	History of good health. Very well during pregnancy save for an attack of influenza in the 7th month.	Confined prematurely, infant being born in taxi during transit to Maternity Home.	Baby weighed 3 lbs. 6½ oz. Very feeble. Frequent convulsions. Died within 3 days.
3	27	4	1	No severe illnesses. Poor home conditions. Other confinements normal.	Normal delivery at home.	Premature twins. Mother and babies transferred to Maternity Home. Infants very feeble and died within 24 hours.
4	22	2	4	Good health. 1st baby premature and feeble. Died within 24 hours. Well during this pregnancy but had three falls during one week in the 7th month.	Normal delivery in Maternity Home of feeble premature baby.	Baby very feeble and died in 2 days.
5	26	2	7	Good general health. Operation on nose 1930. 1st pregnancy twins, one stillborn. Present pregnancy felt tired and had giddy turns. Some pain in right side. Hydramnios present. Foetal heart not heard 2 weeks before term.	Normal delivery in Maternity Home.	Infant's condition very poor. Blood-stained mucus draining from mouth. Deformity of left hand. Death in 24 hours.

Neo-Natal Deaths in relation to Ante-Natal Work, 1935—Contd.

No.	Age.	Para.	Visits	Mother's History.	Confinement.	Infant's History.
6	21	1	2	Mother appeared healthy, but tired and worried. Was given free milk and halibut oil. Had booked a private midwife. Albumin present on 2nd visit. Blood pressure 140.	Admitted to Maternity Home 10 days after, for toxæmia, oedema and albuminuria being present. Premature delivery of twins, 1 lb. 2 oz., 2 lb. 6 oz.	Infants very feeble. Died within 24 hours.
7	33	2	9	Good general health. Deformity of right hand, useless thumb. Cannot turn arm well. 1st confinement normal, breech birth. Well during this pregnancy, but for cramp and breathlessness.	Admitted to Maternity Home 10 days after last visit, apparently very ill and with distressed breathing and pain in chest. Albumin present. Normal delivery.	Baby very cyanosed at birth. Died within 24 hours. Weighed 7 lbs. 12½ oz.
8	22	2	2	Good health. 1st confinement difficult forceps case. Present pregnancy mother well. Varicose veins present.	Normal confinement.	Infant born with deformed feet. Died 10 hours after birth.
9	23	1	5	Two attacks of pleurisy, one in childhood, the other in 1934. Coughs and colds since. Much cold and cough during present pregnancy. Seen 8 days before delivery. Everything normal. Private midwife booked.	Jerked herself getting off a train. Labour started prematurely and 5 lbs. infant delivered.	Died in 6 hours.

REPORT ON THE INSPECTION OF MIDWIVES AND NURSING HOMES, 1935.

(By Dr. VIOLET KING, Assistant Medical Officer of Health
and Inspector of Midwives.)

During the year, 37 midwives signified their intention to practise, 17 of them privately. The latter figure includes those attached to Nursing Homes. One midwife is retiring altogether; one is too old to do more than a very few cases and one married midwife, new to the town, is not intending to practice at present.

24 routine visits were paid to midwives in their homes and 2 special ones. Each Nursing Home was visited twice during the year.

The following forms, other than for medical help, were sent in by midwives :—

Artificial feeding, 8. The following reasons were given :—

“ Much difficulty in baby sucking through difficult breathing,” “ Mother states she can never feed infants,” “ Mother to return to previous employment,” “ Mother in business and unable to breast feed,” “ Mother’s poor condition—doctor’s orders,” “ Mother’s lactation not properly established. Infant—facial paralysis,” “ Doctor’s orders,” “ Baby has been adopted.”

Notification of deaths in midwives practice 14. 1 mother and 13 infants.

Notification of laying out of dead bodies 9. 2 mothers and 7 infants.

Notification of infectious conditions and contact with them, 3, for the following conditions :—

- 1 “ Children suffering from measles.”
- 1 “ Rise of temperature ”
- 1 “ Scarlet fever.”

Notification of stillbirth, 18.

No. of medical help forms sent in :—

For mothers	225
For babies	43

**CONDITIONS FOR WHICH MEDICAL HELP WAS SOUGHT
BY MIDWIVES, 1935.**

MOTHER.		CHILD.	
Ruptured perineum	.... 82	Discharging eyes	.... 20
Prolonged labour	.... 40	Dangerous feebleness	.... 7
Extended or complicated breech	.... 14	Prematurity with dangerous feebleness	.... 6
Albuminuria	.... 13	Abnormalities	.... 2
Ante-partum Haemorrhage	11	Cyanosis	.... 2
Post-partum Haemorrhage	5	Convulsions	.... 1
Uncertain, or malpresentation	5	Persistent vomiting	.... 1
Retained or adherent placenta	5	Difficult breathing	.... 1
Disproportion	.... 4	Swelling of hands	.... 1
Induction	.... 3	Broken down blebs in groins	1
Rise of temperature	.... 5	Sores on infant's face	.... 1
Toxaemia of pregnancy	.... 4		—
Abortion	.... 3		43
Poor general condition	.... 3		—
Excessive vomiting	.... 2		
Haemorrhage during pregnancy	2		
Uterine Inertia	.... 1		
Rigid os	.... 1		
Swelling of feet and legs	2		
Swelling of feet	.... 1		
Chorea and heart condition	1		
Heart condition	.... 1		
Pain in left thigh	.... 2		
Pain in chest	.... 1		
Prolapse of cord	.... 1		
Prolapse of cervix	.... 1		
Persistent cough	.... 1		
Post Maturity	.... 1		
Maternal distress	.... 1		
Illness of Patient	.... 1		
Elderly primipara	.... 1		
Hysteria	.... 1		
History of difficult labour	1		
Nervousness of patient	.... 1		
Collapse after delivery	.... 1		
Infant died before arrival of midwife or doctor.	.... 1		
Patients' own request	.... 2		

PUERPERAL PYREXIA.

29 cases of puerperal pyrexia and none of puerperal fever were notified in the Borough in 1935. This is by far the lowest number of recent years; the numbers for the three preceding years being 47, 51 and 56. All but three of the cases occurred in the Maternity Home where the New South Wales Convention is in force. Every case but one, which was trivial and occurred in a private nursing Home, was treated either at the Maternity Home or/and at the Isolation Hospital. One case (scarlet fever) died. Of the 26 cases notified from the Maternity Home, only 11 were notifiable on the British Convention under the Puerperal Pyrexia Order. The puerperal pyrexia rate for the Borough works out at 14.8 and the puerperal sepsis death rate at 1.29 per 1,000 live and still births.

MATERNAL DEATHS.

Seven deaths were investigated, two of which did not belong to the Borough and one was not a maternal death. The remaining four deaths were caused :—

1. Scarlet Fever
2. Septicaemia following breast abscess
3. Sudden death after Caesarian Section
4. Toxaemia

The Registrar-General accredits Swindon with 3 maternal deaths, which give a maternal mortality of 3.87. This is the least favourable rate registered for some years.

OPHTHALMIA NEONATORUM.

Five notifications of ophthalmia neonatorum were received during 1935 and a bacteriological examination was made in every case. None was gonorrhoeal; all were trivial and recovered without any damage.

In addition, 64 cases of sore and discharging eyes were notified by midwives. These include 4 of the 5 cases which were notified. 27 of them occurred in the Maternity Home and in all these a bacteriological examination was made. None of these cases was gonorrhoeal. Of the remaining 33, a bacteriological examination was made in 11, and the remaining 22 were so trivial that no action of any kind was considered necessary. In addition to these, 6 cases which had not been notified nor referred by the midwife, were seen at the Infant Welfare Clinic. These were examined bacteriologically and none of them was gonorrhoeal. For the fifth year in succession no case of gonorrhoeal ophthalmia

occurred in a native of Swindon. In 1932 and 1933 there was one case each in the infants of women, who, though delivered in Swindon, were not natives of the Town. The history of gonorrhoeal neonatorum in Swindon appears to have been as follows :—

Prior to 1920 the condition must have been fairly common, because there was a considerable amount of blindness resulting from it. In 1920 a very distressing case occurred and it was from consideration of this case that when I was appointed Medical Officer in 1920 I determined upon a course of action designed to prevent, so far as is humanly possible, blindness resulting from ophthalmia neonatorum. The scheme did not profess to be able to influence the incidence of the disease, but it did make it practically impossible for any case to occur and remain unrecognized and untreated. We have not since that date had any case of blindness resulting from ophthalmia neonatorum, though there have been five cases in which some damage to the eyes has occurred. It was not until 1923, however, that a bacteriological examination was made of every case of sore and discharging eyes. In 1923 and 1924 a considerable number, namely 23 in the first year and 13 in the second, of gonorrhoeal infection was discovered, but after 1925 the cases became uncommon. 1930 was the last year in which any case of gonorrhoeal ophthalmia occurred in a native of Swindon and in that year there were 8 cases. The decline in incidence of gonorrhoeal ophthalmia to zero, which we hope, but do not expect, to be an extinction, cannot be accredited to the ophthalmia neonatorum scheme, but is probably due to the decline in gonorrhoeal infection in the women of Swindon. Normally one would expect a minimum of gonorrhoea in Swindon and doubtless the high incidence of gonorrhoeal ophthalmia in the early years of the last decade was connected with the great increase of venereal disease which occurred in the War period. The Ophthalmia Neonatorum Regulations did not come into force until 1926, but the requirements of the Order were identical with those of the local scheme which had been introduced five years earlier. Some five years ago I deduced that sore and discharging eyes (other than gonorrhoeal) in infants was a matter of considerable importance in the study of puerperal pyrexia and in that of general epidemiology. Subsequent experience has confirmed me in the view that conjunctivitis is one of the commonest and also the earliest reaction to those endemic parasites which infect all of us. In view of the complete change in our views of infection which have led to the modern theory of epidemics, these observations on the ophthalmia of infants have considerable significance.

OPHTHALMIA NEONATORUM.

Year	No. Notified	Cases of Infantile Ophthalmia due to Gonococcus	Where Treated			Result.			Not Notified as O.N.
			Home	Gorse Hill	Clinic	Maternity Home.	Cured	Injured	
*1921	7	?	3	—	4	—	7	—	19
1922	21	?	2	...	19	—	20	1	16
1923	34	23	5	4	25	—	30	2	11
1924	15	13	...	3	10	2	15	...	12
1925	9	4	1	2	5	1	9	...	11
1926	8	3	...	...	8	...	8	...	22
1927	11	5	1	3	6	1	11	...	15
1928	4	4	2	2	2	...	4	1	30
1929	3	2	...	1	4	...	2	...	28
1930	11	8	1	1	6	...	11	...	58
1931	4	...	1	4	2	...	4	...	55
1932	5	1	1	1	4	...	5	...	49
1933	3	1	1	1	1	...	2	...	46
1934	4	...	2	2	2	...	4	...	52
1935	5	...	2	2	2	...	5	...	60

* These figures are incomplete.

Table showing number of cases of Ophthalmia Neonatorum notified, the number treated, the results of treatment, and the number of deaths occurring.
1935.

No. of Cases Notified.	No. of Cases	Vision Unimpaired	Vision Impaired	Total Blindness	Deaths
Treated at Clinic	2	2	....	....
Treated at Gorse Hill Clinic
Treated at Maternity Home	1	1	....	....
Treated Privately	2	2	....	....
TOTALS	5	5	....	....

PEMPHIGUS NEONATORUM.

The following is a copy of a report which was prepared in September 1935, copies of which were sent to the County Medical Officer and to the Ministry of Health.

NOTES ON AN OUTBREAK
OF
PEMPHIGUS NEONATORUM
WHICH OCCURRED IN
SWINDON MATERNITY HOME.

APRIL—JULY, 1935.

DUNSTAN BREWER.

An outbreak of Pemphigus Neonatorum occurred in the Swindon Maternity Home in the early Summer of 1935 which, though the individual cases were of small clinical importance, gave rise to anxiety and presented a problem of some epidemiological interest.

Pemphigus Neonatorum is an official name for any skin eruption characterized by blebs, vesicles or bullae occurring in new-born children. Five different reactions, which differ widely in their pathology and epidemiology, are included under the designation. These are :—

1. *Syphilitic pemphigus.* Vesicular eruptions used to be not uncommon in congenital syphilis, though of late they have become somewhat rare. The eruptions are symmetrical, generally typical in distribution and the disease frequently fatal. Though spirochetes are present in the blisters, the disease does not appear to be contagious.
2. *Gonorrhoeal pemphigus.* This is rare, but not so rare as it is supposed to be. It is usually accompanied by ophthalmia or vulvitis. The blisters are apt to be large, filled with matter like melted butter containing gonococci in profusion. Like syphilis it should be contagious, but we have no reliable evidence that it is.
3. *True pemphigus.* In my belief this is a virus disease of herpetic order. It is highly infectious and has an incubation period of three days. The eruption is symmetrical, but like chicken-pox comes out in crops. At first the contents of the vesicles are sterile by ordinary cultivation. Many small outbreaks of this disease have been recorded recently. One occurred in Swindon a few years ago. Formerly the disease was widespread and very fatal, but of late its fatality has been slight. It seems that it may be spread by fingers, for many recent outbreaks have been limited to the practice of individual midwives.
4. *Streptococcal pemphigus.* This is common, especially in the infants of women with grave puerperal sepsis. In these cases the eruption is symmetrical and the disease generally fatal. In other cases the eruption is irregular in distribution, varying from a few vesicles to numerous extensive bullae and recovery usual. The diagnosis is established by bacteriology.

5. *Staphylococcus pemphigus*. This is really a variety of impetigo. The causal parasite is *staphylococcus aureus*. As this is the form which occurred in Swindon in 1935 it calls for a detailed description.

Staphylococcus aureus was one of the first human parasites to be described (1884) but, though it has been studied for fifty years, our knowledge of its biology is still scanty. It is a universal epiphyte of man living upon the skin, its seat of election being the skin surrounding the finger nails. It is generally harmless, but if rubbed into the skin, as in the neck by collars, the buttocks during rowing, etc., it produces boils and carbuncles. Also, if the skin is broken, *staphylococcus aureus* may get in and set up suppuration. Naturally from its seat of election it is most liable to cause suppuration round the nails (whitlow) and from these lesions it is often spread by scratching, or rubbing to other parts causing impetigo (one form). In the new-born peronychitis from *staphylococcus aureus* is quite common. Personally, I have never grown *staphylococcus aureus* from inflamed eyes or other lesions of the mucous membranes of infants, though not uncommonly from unsatisfactory navels. In the present series of cases it was grown pure from the vesicles in all cases in which it was sought. *Staphylococcus aureus* also occasionally sets up the most rapidly fatal septicaemia known to us and causes three pyaemic diseases—perinephritic abscess, osteomyelitis and ulcerative endocarditis and also a fatal form of pneumonia. As all these grave forms of staphylococcal disease, especially osteomyelitis and pneumonia, are apt to occur in outbreaks it is not impossible that the parasite which causes them is a different variety from the usually harmless epiphyte, but whether it is, or not, we do not know.

The pemphigus cases which occurred in Swindon in 1935 were not serious ; indeed, excepting two, they were so trivial that had they occurred singly they would have been dismissed as of no consequence ; but their occurrence in epidemic form gave anxiety lest they may have been the precursor of more dangerous conditions and possibly the starters of an outbreak of puerperal sepsis.

The cases started either as a peronychitis, or as a napkin rash and the eruption was in many limited to, and in all was nearly limited to the bathing-drawers region, though in some, lesions on the peripheries of the limbs (apart from peronychitis) were present. There was no constitutional disturbance and all recovered completely. The cases known to us all occurred in the Maternity Home, except two in the Extern Department, but the affection was so slight that cases may have occurred elsewhere and been missed. At the time of the outbreak, impetigo was rather more common amongst the school-children than it is usually and

one case of perinephritic abscess was present in the Town. The Town generally was at the tail end of an epidemic of scarlet fever, the dominant parasite being streptococcus which was still giving much trouble, but except for what has been mentioned, staphylococcus was not troubling us. The epidemic situation at the Maternity Home can be gathered from Schedule I. At the time the Home was being re-decorated, which interfered with proper isolation, necessitated shifting the patients about and generally antagonised the machinery for inhibiting cross-infection. Moreover the staff was depleted by holidays and sickness. One of the midwives at one time had a small boil on her hand. She had nursed two of the pemphigus cases but not the earlier, or later cases, so she was probably a victim and not a culprit. We could not incriminate any member of the staff for being specially concerned, but as the staphylococcus is almost universally epiphytic upon human hands and cannot be dislodged, anybody can spread it. Of course new-born babies are free, but they cannot remain free for many hours. It is however curious that though isolated cases of peronychitis and a few 'spots' are part of the ordinary routine of baby work, I have not in my experience met with an occurrence quite like this outbreak of pemphigus. The distribution of the vesicles suggested that the napkins might be at fault, but those used were not different in kind, material, origin, preparation, or washing from what were in use before and after the outbreak, and a random sample examined bacteriologically was sterile of staphylococcus aureus. The cases were isolated, but as the only isolation likely to be of avail is isolation from human fingers—which is impossible—the isolation was as futile as it was expected to be.

Brief clinical notes of cases are given in Schedule II.

SCHEDULE I.

A SUMMARY OF THE CASES DELIVERED IN THE MATERNITY HOME IN THE PERIOD COVERING THE OUTBREAK OF PEMPHIGUS NEONATORUM 1935.

Apart from this occurrence, the epidemiology of the Town was 'normal' the dominant parasite being streptococcus.

Date of Delivery	Character of Labour	Character of Temperature.	Character of Pyrexia.	Notes.
2-4-35	R.P.	Pyrexia 100.2		Infant O.N. Bac. Pn.
2-4-35	Adherent placenta	Irreg. 100		
3-4-35	R.P.	Irreg. 99.2		Infant pyrexia 102 Died one day. Deformed.
4-4-35	N.	Irreg. 99.8		
4-4-35	R.P.	Fever 102.6	C	Notified. Mother removed to Isolation Hospital and died. Streptococcal metritis. Scarlet Fever. Infant died first day.
6-4-35	Induced R.P.	Irreg. 100		
7-4-35	N.	Irreg. 99.4		
9-4-35	Forceps R.P.	Pyrexia 100.4		Infant purpuric rash and O.N. Bac. sterile.
9-4-35	N.	N.		
10-4-35	Breech	Pyrexia 101	B	Infant died one day. Notified.
11-4-35	N.	N.		
13-4-35	N.	Pyrexia 100.8	B	
13-4-35	N.	N.		Infant unsatisfactory umbilicus.
14-4-35	R.P.	Irreg. 100		
15-4-35	N.	Irreg. 99.2		
15-4-35	N.	N.		
15-4-35	R.P., P.P.H.	Pyrexia 100.4		
15-4-35	N.	N.		
17-4-35	N.	Pyrexia 100.4		
17-4-35	N.	Irreg. 100		
18-4-35	Induction	N.		
	Forceps R.P.			
18-4-36	N.	Irreg. 100		
18-4-35	Forceps. R.P.	N.		
18-4-35	N.	N.		*(1) Infant pemphigus.
19-4-35	N.	N.		
19-4-35	N.	N.		
19-4-35	N.	N.		
20-4-35	N.	Irreg. 99.6		

Date of Delivery.	Character of Labour.	Character of Temperature.	Character of Pyrexia.	Notes.
21-4-35	N.	Irreg.	99.4	
21-4-35	N.	Irreg.	99.2	
27-4-35	Cardiac case R.P.	Irreg.	100	
28-4-35	Forceps. R.P.	N.		
28-4-35	Toxaemia. Induction.	Pyrexia	100.4	Infant stillborn.
29-4-35	N.	N.		
29-4-35	N.	N.		
30-4-35	N.	N.		
30-4-35	N.	Irreg.	99.8	
30-4-35	R.P.	Irreg.	100	
				Infant O.N. Streptococcus.
2-5-35	Albuminuria N.	N.		
3-5-35	N.	Irreg.	99.4	
3-5-35	N.	Irreg.	99.8	
4-5-35	N.	Irreg.	100	
4-5-35	N.	N.		
4-5-35	N.	Pyrexia	100.2	
6-5-35	N.	Irreg.	99.4	
7-5-35	R.P.	Pyrexia	101.6	E.
7-5-35	Forceps	Normal		
9-5-35	N.	N.		
10-5-35	N.	Pyrexia	100.2	
10-5-35	N.	Irreg.	99.4	
11-5-35	Induced. R.P.	N.		
16-5-35	N.	N.		
16-5-35	N.	Irreg.	99.2	
18-5-35	N.	Irreg.	100	
19-5-35	Forceps	Pyrexia	100.8	
19-5-35	N.	Irreg.	99.4	
19-5-35	N.	Irreg.	99.6	
20-5-35	N.	Irreg.	99.6	
				Mother chronic ear disease.
20-5-35	Forceps R.P.	Irreg.	100	
24-5-35	Breech	Pyrexia	100.2	C.
26-5-35	Forceps	Irreg.	99.6	
28-5-35	Induction	Irreg.	99.6	
28-5-35	Albuminuria	Fever	103.6	B.
29-5-35	Forceps. R.P.	Irreg.	99.4	
30-5-35	N.	N.		
30-5-35	N.	Irreg.	99.4	
1-6-35	Albuminuria Forceps.	N.		
				Stillbirth, macerated hydrocephalus.

Date of Delivery	Character of Labour.	Character of Temperature.	Character of Pyrexia.	Notes.
1-6-35	N.	Irreg. 100		
1-6-35	Forceps. R.P.	Irreg. 99.8		
3-6-35	N.	Irreg. 99.6		
4-6-35	R.P.	Pyrexia 100.8	B.	
4-6-35	N.	N.		Infant O.N. Sterile.
6-6-35	R.P.	Irreg. 99.4		
6-6-35	N.	Pyrexia 100.4	E.	
7-6-35	N.	Irreg. 99.2		*(2) Infant peronychitis.
7-6-35	N.	N.		*(3) Infant P.N.
8-6-35	N.	N.		*(4) Infant P.N.
8-6-35	N.	N.		*(5) Infant P.N.
9-6-35	Forceps	Irreg. 99.6		
9-6-35	N.	N.		
11-6-35	N.	Fever 101.8	D.	*(6) Infant P.N.
11-6-35	A.P.H.	Irreg. 99.4		
13-6-35	R.P.	Irreg. 99.4		
14-6-35	N.	Irreg. 99.4		Infant peronychitis. No. P.N.
14-6-35	R.P.	Irreg. 99.8		Infant stillborn, macerated.
16-6-35	N.	N.		*(7) Infant P.N.
16-6-35	N.	Fever 101.2	E.	Notified. Removed to Isolation Hospital. Rheumatic fever.
17-6-35	Induction	Irreg. 99.8		Infant premature stillborn.
18-6-35	N.	Irreg. 99.2		*(8) Infant P.N.
20-6-35	N.	N.		*(9) Infant P.N.
21-6-35	Forceps. R.P.	Irreg. 99.8		*(10) Infant P.N.
21-6-35	N.	N.		
22-6-35	Forceps	Pyrexia 100.4	C.	*(11) Infant P.N.
23-6-35	N.	Irreg. 99.4		
23-6-35	A.P.H.	N.		Infant O.N. sterile.
24-6-35	R.P.	N.		*(12) Infant P.N.
25-6-35	R.P.	Pyrexia 100.2		
26-6-35	N.	Irreg. 99.6		*(13) Infant P.N.
27-6-35	R.P.	Irreg. 99.4		
27-6-35	R.P.	Pyrexia 100.4	B.	
27-6-35	Adherent placenta	Irreg. 99.6		
28-6-35	N.	Irreg. 99.4		*(14) Infant P.N.
28-6-35	R.P.	Irreg. 99.6		*(15) Infant P.N.
30-6-35	Induction.	Irreg. 100		
	Forceps adherent placenta.			
30-6-35	N.	N.		
1-7-35	N.	Pyrexia 101	C.	
1-7-35	N.	N.		
2-7-35	N.	N.		*(16) Infant P.N.
5-7-35	R.P.	N.		*(17) Infant P.N.

Date of Delivery.	Character of Labour.	Character of Temperature.	Character of Pyrexia.	Notes.
6-7-35	N.	N.		
9-7-35	N.	Irreg. 100		
10-7-35	N.	N.		
10-7-35	N.	N.		
10-7-35	Forceps. R.P.	Irreg. 99.2		
12-7-35	N.	N.		
13-7-35	N.	N.		
14-7-35	N.	N.		*(18) Infant P.N.
14-7-35	R.P.	N.		*(19) Infant P.N.
15-7-35	N.	Fever 102.2	C.	*(20) Notified. Infant P.N.
15-7-35	R.P.	N.		
16-7-35	Forceps. R.P.	Irreg. 99.4		
19-7-35	N.	Irreg. 100		Premature Infant. Died third day.
19-7-35	N.	Pyrexia 100.2	B.	Infant anencephaly Stillborn.
19-7-35	N.	Fever 102.2	B.	Notified. Breast.
19-7-35	N.	N.		
20-7-35	N.	N.		*(21) Infant P.N.
20-7-35	N.	Irreg. 99.8		
20-7-35	Toxaemia	Irreg. 99.8		
23-7-35	N.	Irreg. 100		
23-7-35	N.	Irreg. 100		
23-7-35	N.	N.		
24-7-35	R.P.	N.		
26-7-35	N.	N.		
27-7-35	N.	N.		
27-7-35	N.	Irreg. 99.4		
1-8-35	N.	N.		
1-8-35	N.	N.		

NOTES ON SCHEDULE 1.

Puerperal Temperatures are taken 4 hourly and graded as follows :—

1. Normal. No record above 99°
2. Irregular. No record above 100° The highest recorded reading is given.
3. Pyrexia. No record above 101° The highest recorded reading is given.
4. Fever. No record above 104° The highest recorded reading is given.
5. Hyperpyrexia. Temperature charts containing a record above 104°

Notification is governed by the New South Wales Convention.

138 deliveries are recorded, of these :—

54 had normal temperatures	38%
59 had irregular temperatures	43%
19 had pyrexia	15%
6 had fever	4%

The "expectation" based on 757 consecutive deliveries is :—

Normal	....	....	37%
Irregular	....	....	43%
Pyrexia	....	....	17%
Fever	....	....	3%

Scrutiny of the records convinces me that the maternal herd was uninfluenced

SCHEDULE II.

THE INDIVIDUAL CASES OF PEMPHIGUS.

- * (1) 18-4-35 Started septic peronychitis, followed by atypical pemphigus. Septic navel. Moderately severe case. Not cured until 27-5-35.
- * (2) 7-6-35 Peronychitis. Trivial.
- * (3) 7-6-35 Napkin. Trivial.
- * (4) 8-6-35 Napkin. Trivial.
- * (5) 8-6-35 Napkin. Septic navel. Moderately severe. Not cured until 7-8-35.
- * (6) 11-6-35 Started peronychitis, spread to buttocks. Slight. Cured 5-7-35.
- * (7) 16-6-35 Napkin. Slight. Cured 17-7-35.
- * (8) 17-6-35 Napkin. Trivial.
- * (9) 18-6-35 Napkin. Slight. Cured 8-7-35.
- *(10) 21-6-35 Napkin. Slight. Cured 22-7-35.
- *(11) 22-6-35 Napkin. Trivial.
- *(12) 24-6-35 Napkin. Trivial.
- *(13) 26-6-35 A few small blebs on the leg. Trivial.
- *(14) 28-6-35 Peronychitis. Trivial.
- *(15) 28-6-35 A few small spots on the head and chin. Trivial.
- *(16) 2-7-35 A few spots on the right thigh. Trivial.
- *(17) 5-7-35 Peronychitis. Trivial.
- *(18) 14-7-35 Double mastitis, navel, belly and thigh. *Staphylococcus aureus*. Moderately severe.
- *(19) 14-7-35 Peronychitis. Trivial.
- *(20) 15-7-35 Napkin. *Staphylococcus aureus*. Slight.
- *(21) 20-7-35 Four blebs sacral region. Trivial.

The two cases which occurred in the Extern Department were as follows :—

- 26-4-35 O.N. Pemphigus limited to the bathing drawers region.
- 8-7-35 O.N. A few blebs on the thighs.

In neither of these cases was the discharge or the contents of the vesicles examined bacteriologically. They were attended by different pupil midwives and neither the pupil midwives, nor the Extern Sister, had come in contact with the cases in the Maternity Home.

CHILDREN ACTS, 1908 and 1932.

Beyond a few trivial breaches of the Acts, due entirely to ignorance, no trouble was experienced with boarded-out children.

**Table Showing the Number of Visits Paid by the Health Visitors
to Mothers and Children and to cases of Tuberculosis.**

	1931	1932	1933	1934	1935
No.of first visits paid to mothers and children	910	896	778	857	945
No. of revisits	4250	4445	4528	3690	3244
No. of visits paid to expectant mothers	294	299	263	183	113
No. of visits paid to cases of deaths and stillbirths	95	103	77	80	60
No. of visits to cases of Tuberculosis	168	105	81	83	59
No. of visits paid to children aged 1—5 years	5497	5686	5877	4859	4403
	11214	11534	11604	9752	8824

Record of Work done at the Infant Welfare Centres during the Years 1931—1935 inclusive.

	1931	1932	1933	1934	1935
No. of separate Infants who attended the Centre at—					
Eastcott Hill	1303	1310	1315	1280	1189
Gorse Hill	244	267	255	212	205
Rodbourne	253	230	203	195	250
Pinehurst	145	159	153	158	198
TOTAL	1945	1966	1926	1845	1842
Number of Attendances—					
Eastcott Hill	8488	8048	7584	6850	7591
Gorse Hill	1774	1869	2047	1644	1699
Rodbourne	2258	2118	2034	1487	1395
Pinehurst	929	1108	842	884	1110
TOTAL	13449	13143	12507	10865	11795
Number of cases which received medical advice and treatment	1049	1020	1050	1108	1018
Total Consultations	3445	3169	2874	2899	3252

RECORD OF WORK DONE AT INFANT WELFARE CLINICS
(continued).

	Infants	Toddlers	TOTAL
No. seen and treated during 1935	769	249	1018
No. of Operations for the removal of Tonsils and Adenoids	—	3	3
No. of Bacteriological examinations	22	4	26
No. of Haematological examinations	—	8	8
No. of X-Rays examinations	7	6	13
No. of Mental Defectives	6	6	12
No. of Physical Defectives	5	1	6
No. of Blind Children	1	1	2
No. of Deaf Children	—	—	—
No. of Mute Children	—	—	—

Table Showing the Number of Infants and Toddlers referred to Special Departments for Treatment during 1935.

	Infants	Toddlers	TOTAL
Dental Clinic	6	360	366
Eye Clinic	10	18	28
V.D. Clinic	4	2	6
Orthopaedic Clinic	4	1	5
Throat, Nose and Ear Clinic	—	3	3
Electrical Clinic	10	—	10
Tuberculosis Clinic	1	—	1
Rheumatic Clinic	—	—	—
TOTAL	35	384	419

THE MILK (MOTHERS AND CHILDREN) ORDER.

	1931	1932	1933	1934	1935
No. of applications granted	158	270	265	206	205
Total quantity of Milk issued (Galls)	3069	7025	8320	7105	7627
TOTAL COST (approx.) £	270	635	770	720	825

THE PROVISION OF FREE MILK FOR CHILDREN AGED 1—5 YEARS.

(By VICTOR R. WALKER, Deputy Medical Officer of Health).

During 1935 one hundred and eight children over 12 months were granted an issue of one pint of milk daily for varying periods of time. This was only given in cases selected for medical reasons, each case being reviewed at monthly intervals and the allowance continued only if the condition warranted.

Scrutiny of the records of these cases shows the impossibility of classifying them into definite disease groups. They almost all come under the embracing term of malnutrition, the only distinct group being that containing infants whose nutrition has received a severe setback from the incidence of severe infection, such as whooping cough, measles, or broncho-pneumonia, at a very tender age. The severity of the illnutrition varied greatly and it was often very difficult to separate the nutritional and the environmental factors at work. Feeding histories obtained were probably often inaccurate. In only one case was the story of such an unbalanced basic diet as "boiled bread" obtained, but in almost all there was definitely the lack of a sufficient ration of fresh milk over a considerable period. Several had an absence of fresh milk in the diet for months, the only supply being sweetened condensed milk. The child of 12 months is seldom however actually reported to be "having tea now" as in certain Midland industrial areas.

Among the younger toddlers the signs of malnutrition most commonly noted were a general muscular flabbiness and lack of vital tone and a failure to develop normally. Peevishness and irritability are common case notes. Actual wasting which the lay mind might expect is seldom present—in fact the illnourished child may be heavier than normal from a waterlogging of the body tissues. The abdomen was frequently noted as large and pendulous—in two cases an outside provisional diagnosis of abdominal tuberculosis cleared up on the exhibition of fresh milk. Anaemia in two or three cases was fairly marked on blood count. Many of the cases suffered at different times from catarrhal infections of the alimentary and respiratory tracts, skin and eyes, which are easily superimposed on unhealthy skin and body lining-membranes. There were no cases of gross rickets, but several cases showed such a tendency, confirmed by X-ray of the epiphyses, by the signs of delayed closure of the fontanelle, delayed or irregular dentition and skeletal weakness.

The state of malnutrition, apart from aggravating factors in nurture and environment, would appear almost always due to an unbalanced diet. Such contains a deficiency of the more valuable—and unfortunately also the dearer—elements of diet, namely, first class protein, mineral matter and vitamins, often with a relative deficiency of fat. The diet is usually made up with an excess of starch and sugar, which are the energy giving foods but cannot build up the rapidly growing tissues of the young child. In counteracting this unbalance an adequate allowance of fresh milk with the adjuvants of halibut liver oil or cod liver oil cannot be improved upon.

An observer is struck by the frequency with which the nutrition of a toddler suffers when there is a quick succession of children in a family of limited income. This may be partly due to the loss of first claim on maternal care at a too tender age, but is probably more accounted for by the fact that a limited family income allows only of the purchase of a certain quantity of fresh milk which is stretched out among the children, the youngest child being naturally the most favoured, and the daily allowance recommended by the Advisory Committee on Nutrition of one pint for all children under 6 years and half a pint between 6 and 12 years is seldom if ever reached in such families.

Among the older children of the group appetite poor and appetite "finicky" are common notes. Orr in a recent survey of nutrition points out that loss of appetite is often one of the first signs of malnutrition. This one would expect where a prolonged improper or poverty diet has led to impairment of the quality or quantity of the digestive juices and delicate stomach lining, and the condition is much more amenable to treatment in the toddler stage than at school-age. The ill-nourished child occasionally met with at school medical inspection is often stated to be unable to take milk. This inability is probably due to the too prolonged previous absence of such from the diet. Here the digestive damage is likely to be more severe and must frequently be permanent.

Altogether the provision of milk in this group, though limited to cases of actual impaired nutrition, has shown itself a measure of considerable value in Preventive Medicine. Given in time, which means before an actual state of disease is established, this aid to nutrition must frequently save prolonged and expensive hospital in-patient treatment with material saving to the community in addition to its inestimable value in Child Welfare.

VICTOR R. WALKER,

Deputy Medical Officer of Health.

INFANTILE MORTALITY.

The deaths of all persons under the age of 25 which occur in Swindon, and of all Swindon children who die away from the town, are investigated. Some knowledge of the previous history of these children is in the possession of the Health Office and, in an increasing number, the full life histories are available. Since some children die in the institutions of Swindon who do not belong to the town, and certain other children who have regularly attended the Swindon clinics die elsewhere, these investigations become somewhat complicated. In the review which follows, cognizance is only taken of those deaths which the Registrar General accredits to Swindon.

STILLBIRTHS.

43 stillbirths were notified in Swindon during 1935, of which 12, which occurred in the Maternity Home, are not accreditable to the Borough. This leaves 31 cases belonging to the Borough, against 28, 33, 36, 33 and 42 in the five preceding years. 11 Borough cases and the 12 outside cases were delivered in the Maternity Home.

Of the 11 cases which occurred in the Maternity Home, 9 of the mothers had attended the Ante-natal Clinic. Of the 20 that were delivered in their own homes only 3 of the mothers had attended the Ante-natal Clinic.

All but two of the stillbirths were legitimate.

Except for those cases which occur in the Maternity Home, nothing is gained by trying to discover causes of stillbirths.

DEATHS BEFORE THE END OF THE FIRST DAY.

8 such deaths occurred, against 9 for last year, 4 males and 4 females. All were legitimate. 3 were born in the Maternity Home. 2 were first pregnancies, 1 second, 3 third, and 2 fourth.

One of these deaths was uncertified. 2, which occurred in the Maternity Home, died from congenital malformations. There is no satisfactory explanation of the others.

2 of the mothers had attended the Ante-natal Clinic.

DEATHS BETWEEN THE END OF THE FIRST DAY AND THE END OF THE FIRST WEEK.

15 such deaths occurred, against 17 for last year, 10 males and 5 females. One died outside the town and of this no details are available. 8 died in the Maternity Home. 7 were first pregnancies, 3 second, 2 third and 2 fourth. All were legitimate.

9 of the mothers attended the Ante-natal Clinic.

1 of these children was a non-viable monster, 1 died of convulsions, following cerebral haemorrhage. There is no satisfactory explanation of the deaths of the remaining 12, but of those who died in the Maternity Home a more or less valid reason for non-survival could be found in three.

DEATHS BETWEEN THE END OF THE FIRST WEEK AND THE END OF THE FIRST MONTH.

3 such deaths occurred, against 7 for last year, 1 male and 2 females. All were legitimate. 1 occurred in the Maternity Home.

1 child died of haemolytic jaundice. The death of the other two cannot be satisfactorily explained.

None of the mothers had attended the Ante-natal Clinic.

All were second pregnancies.

NOTE.—In the following paragraphs, cases marked * were physically and † were mentally defectives.

DEATHS BETWEEN THE END OF THE FIRST MONTH AND THE END OF THE FIRST YEAR.

9 such deaths occurred, against 10 for last year, 6 males and 3 females. 1 was illegitimate.

7 of the cases had attended the Infant Welfare Centre. Of these, one, an illegitimate child, died of broncho-pneumonia, the mother of this child suffering from advanced tuberculosis from which she died shortly after the birth of the child. I think there is little doubt that this infant's death was due to tuberculosis.

Of the 6 that had been breast fed, 1 was a non-viable spina-bifida*. 1 is reported to have died from pyloric stenosis; but this is doubtful. 2 died of enteritis. 1 died of acute bronchitis and 1 died of asphyxia and laryngeal catarrh, which I am satisfied was diphtheritic.

Of the 2 which were not known at the Clinic, both had been breast fed. 1 is reported to have died from bronchial pneumonia and meningitis and the other from broncho-pneumonia.

With the exception of the malformed child and the child of the mother who was dying of tuberculosis, I am dissatisfied with the alleged causes of these children's deaths. I think one of the

broncho-pneumonia cases was probably a whooping cough, another was probably acute rickets. One of the enteritis cases might have been whooping cough.

Altogether the deaths of 35 children under one year of age are accredited to the Borough, of which 26 died within the first month and 9 only between the end of the first month and the end of the first year. Based on 744 births accredited to Swindon, this gives us an infant mortality of 47.04, the lowest recorded in the Borough, with the exception of the years 1927 and 1928.

DEATHS BETWEEN THE FIRST AND SECOND YEAR.

7 such deaths occurred against 6 for last year, 3 males and 4 females. 2 of these cases had not attended the Clinic. 1 was illegitimate, breast fed, and died of whooping cough; the other was artificially fed and is reported to have died from bronchopneumonia, which almost for certain was whooping cough. 5 had attended the Clinic. Of these, 1 was artificially fed and died of measles and 4 were breast fed, two of which died of measles, one of whooping cough and one of croupous pneumonia.

DEATHS BETWEEN THE SECOND AND THE FIFTH YEAR.

8 such deaths occurred, against 16 for last year, 4 males and 4 females. 3 of these children had not attended the Clinic. They were all breast fed and all died of measles, one with a suspicion of measles encephalitis. The 5 who had attended the Clinic—all were breast fed and died, 1 of diphtheria, 1 of septicaemia, almost undoubtedly scarlet fever, 1 of measles, 1 of pneumococcal peritonitis and the last, an imbecile, of pharyngeal paralysis*.

DEATHS BETWEEN THE FIFTH AND THE TENTH YEAR.

9 such deaths occurred, against 9 for last year, 5 males and 4 females. All of these children were known to the Public Health Department. 7 of them died of diphtheria, 1 of scarlet fever and 1 of measles.

DEATHS BETWEEN THE TENTH AND THE SEVENTEENTH YEAR.

8 such deaths occurred, against 6 for last year, 4 males and 4 females. 1 case was not known to the Public Health Department. He was an epileptic imbecile and died of epilepsy†*. The others were known—1 died of diphtheria, 3 from scarlet fever, 1 from appendicitis, 1, upon whom there was a post-mortem and inquest, from haemorrhage into the left frontal lobe of the brain and 1 was killed in a motor accident. The last was almost blind in one eye.

DEATHS BETWEEN THE SEVENTEENTH AND THE TWENTIETH YEAR.

7 such deaths occurred, against 8 for last year, 4 males and 3 females. 2 of these were not known to the Public Health Department. 1 died from pulmonary tuberculosis and the other from a motor accident.

Of the 5 that were known to the Public Health Department, 3 died of pulmonary tuberculosis, 1, a physically and mentally defective, died in status epilepticus†* and 1 died of a general septicaemia of unknown causation, probably influenzal.

DEATHS BETWEEN THE TWENTIETH AND THE TWENTY-FIFTH YEAR.

There were 9 such deaths, against 7 for last year, 5 males and 4 females. Only 2 of these were known to the Public Health Department, one died of pulmonary tuberculosis and the other from puerperal septicaemia (scarlet fever). Of those that were not known to us, 3 males died from motor-car accidents, 1 male of pulmonary tuberculosis, 1 female of pulmonary tuberculosis, 1 female from pleurisy, which was probably tuberculosis, and 1 female from epilepsy†.

**Table Showing the Causes of Deaths of Children under 25 years of age
in the Borough of Swindon during the Year 1935.**

CAUSE.	0-1	1-2	2-5	5-10	10-17	17-20	Total under 20	20-25
<i>Congenital, Ante-natal & Natal Defects and Injuries :</i>								
Congenital Malformations	3	—	—	—	—	—	3	—
Non-viable Monster	1	—	—	—	—	—	1	—
Intercranial Injury	1	—	—	—	—	—	1	—
Jaundice	1	—	—	—	—	—	1	—
*Imbeciles	—	—	1	—	1	1	3	1
Pyloric Stenosis ....	..	1	—	—	—	—	1	—
Unknown ....	....	21	—	—	—	—	21	—
<i>Post-natal Diseases :</i>								
Diphtheria ....	....	1	—	1	7	1	10	—
Scarlet Fever ....	....	—	—	1	1	3	5	1
Measles ....	....	—	3	4	1	—	8	—
Whooping Cough ....	....	—	3	—	—	—	3	—
Croupous Pneumonia and Pneumonia Peritonitis....	—	—	1	1	—	—	2	—
Influenza ....	....	—	—	—	—	—	1	—
Tuberculosis ....	....	1	—	—	—	4	5	4
Appendicitis ....	....	—	—	—	—	—	1	—
Hæmorrhage into brain ....	....	—	—	—	—	1	—	—
+Unsatisfactory ....	....	5	—	—	—	—	5	—
Car Accidents ....	....	—	—	—	1	1	2	3
TOTALS ....	....	35	7	8	9	8	74	9

NOTE— The death of every child under the age of 25 years is made the subject of inquiry, in which all matters connected with the medical history of the child are considered and from the available evidence the conclusion is drawn as to what was the main factor which destroyed life. In the above table the deaths are given in accordance with these findings. They agree in number, but not in causes of death, with the official records.

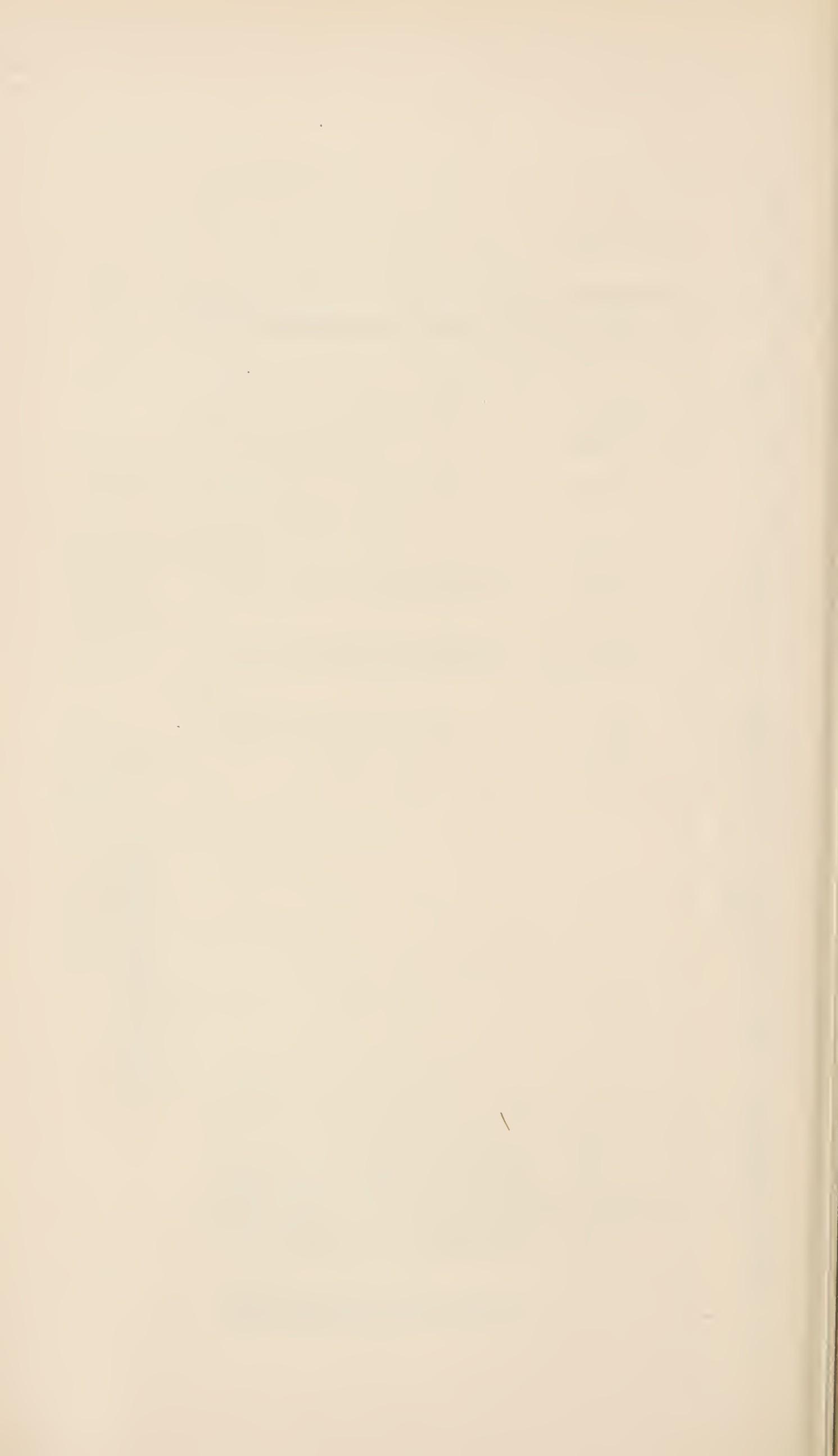
A TABLE SHOWING THE NUMBERS OF DEATHS OF CHILDREN AND YOUNG PERSONS
UNDER 25 YEARS OF AGE.

Year.	No. of births	No. of Deaths.						Total deaths under 17	Estimated number of survivors.	Accident
		0-1	1-2	2-5	5-10	10-17	17-20			
1921	1125	76	†	†	†	†	†	†	933	†
1922	1057	64	15	9	15	11*	13*	867	32	†
1923	995	52	10	9	7	5	12	103	31	1
1924	968	58	14	14	14	5	9	858	—	4
1925	942	53	9	23	9	9	12	103	29	1
1926	980	49	12	10	17	12	17	100	57	3
1927	830	39	8	5	6	7	6	65	24	1
1928	910	33	10	10	7	6	7	80	18	5
1929	867	41	14	12	6	7	6	66	18	4
† 1930	971	61	8	11	19	18	11	117	63	3
1931	910	51	5	9	8	7	5	84	808	4
1932	887	47	10	15	11	6	4	13	787	6
1933	766	40	7	14	6	6	8	17	666	3
1934	770	43	6	16	9	6	7	11	670	4
1935	720	35	7	8	9	9	7	67	26	1

* 10-16 years.

† Information not available.

+ In 1928 the Borough was extended.



Infection and Epidemiology.

EPIDEMIOLOGY.

The epidemiological history of Swindon in 1935 need not detain us long. The year opened well. The town was still dominated by a wave of scarlet fever, which, at the end of 1934, was waning. There was some measles, rather more whooping cough, an average amount of diphtheria, but little pneumonia and no influenza. The Winter was extraordinary healthy. Measles and whooping cough had been but slightly prevalent but had caused a number of fatalities out of proportion to the known incidence. In May, a local outbreak of diphtheria caused disquiet, for though it was limited in area it was somewhat unexpected. It died out very quickly. In June, measles became prevalent but fortunately had not the fatality of the more limited outbreak of the previous December and January. In the early part of June, an outbreak of food poisoning was reported, but this turned out to be a minor epidemic of sore throat. There were no fatalities. In July measles died out and did not trouble us again during the remainder of the year. At the end of July, an outbreak of polio-myelitis occurred. Only one case was notified at the time, but three cases of definite paralysis are known to date from July—August 1935. A fatal case, notified as polio-encephalitis, was in fact measles. Nothing happened until September when diphtheria began to make itself unpleasant and this it continued to do with accelerating malignancy until the end of the year. Beyond this, there was nothing of particular interest in the later months of the year. Yet the year which had started so well and on the whole had behaved itself quite commendably, turned nasty in its old age and about the middle of December we had warning that the approaching Winter was not going to repeat the gentleness of its two immediate predecessors, though the total absence of influenza in all parts of the World offered the consolation that the Winter 1935-1936 would be no worse and possibly less bad than that of 1932-1933.

Belonging to 1935 but not coming to light until January 1936 were a case of encephalitis and two cases of presumed paratyphoid B.

DIPHTHERIA.

The expectation for diphtheria in 1935 was 103 notifications with 9 deaths; the actual numbers were 153 notifications and 9 deaths.

In the past ten years the notifications, confirmed diagnosis and deaths from diphtheria were as follows :—

Year.	Total births in Borough.	Diphtheria Notifications.	Diagnosis confirmed.	Deaths.
1926	980	89	80
1927	830	32	18
1928	910	33	23
1929	867	35	20
1930	971	115	110
1931	910	142	136
1932	887	199	189
1933	766	149	132
1934	770	55	47
1935	720	153	143
		8,611	1,002	898
				64

The maximum expected toll of diphtheria in any community is ten notifications and one death per 100 live births. Taken over a reasonable period, this toll is generally exacted, though the incidence and fatality may vary much from year to year. In a town of the size of Swindon, ten years give a cycle of incidence and it will be seen from the above table that the toll exacted here is not far from the maximum except in regard to the deaths. Death from diphtheria is largely a question of speed in treatment, so in Swindon where we have a right to expect a better than average speed, a lowered fatality rate is an expected benefit. Beyond speed in diagnosis and treatment, no ordinary method of public health control has the smallest influence on diphtheria. The biology of this disease is better known to us than that of any other and from our knowledge it is, or should be, obvious that any attempt to limit the spread of infection must fail ; that what is understood by disinfection is merely playing the fool and that the power we do have of delaying massive infection in early life, which is of immense benefit in measles and whooping cough, is of no value in diphtheria, which is equally fatal at all ages in those virgin to it. We can however almost completely control diphtheria by artificial immunization, a method of strengthening the resistance of the human host against damage resulting from infection without interfering with infection itself. We are making considerable headway with immunization and feel confident that its popularity will grow and one of the greatest menaces to the town will thereby be eliminated.

We have no carriers of corynebacterium in Swindon, but the germ is continuously being introduced. This is the most unfavourable arrangement possible and explains the somewhat frequent children's party epidemics of diphtheria which mar the town's history.

SCARLET FEVER.

There were 246 notifications of scarlet fever in 1935 against 344, 59, 47, 106, 327 in the five preceding years. Two deaths are accredited directly to scarlet fever, but actually six persons died either directly, or indirectly, from it. Haemolytic streptococci remained the dominating parasites throughout the year though they were less virulent than in 1934. Only 10 cases of erysipelas with no deaths, gives an indication of the comparatively low potency of streptococcal infection in 1935.

PNEUMONIA.

150 notifications of pneumonia were received, about average expectation ; but only 29 of them died which is 60% of expectation. Apart from whooping cough and measles there was no epidemic pneumonia.

THE PNEUMONIAS.

The statistics for Pneumonia for the past fifteen years are as follows:—

Year.	Total No. of cases notified.	Total No. of deaths.	Cases removed to Hospital			Cases treated at Home.		
			No.	Deaths	Death Rate	No.	Deaths	Death Rate
1921	36	19	...	0	...	36	19	52
1922	156	43	12	0	0	155	43	27
1923	68	28	31	5	16	56	28	50
1924	175	62	50	10	20	144	57	46
1925	204	61	27	6	22	154	51	33
1926	172	52	63	14	22	145	46	32
1927	202	58	66	16	24	139	44	31
1928	204	53	52	11	21	138	37	27
1929	178	54	44	12	27	124	43	34
1930	105	40	50	8	16	61	28	46
1931	143	37	53	9	17	93	29	31
1932	182	44	25	4	16	129	35	27
1933	147	35	36	3	8	122	31	25
1934	154	40	29	4	20	118	37	31
1935	150					130	25	19
15 years	2274	655	530	102	19.2	1744	553	31.7

THE INFECTIONS DUE TO PARASITES BELONGING TO GENUS BACTERIUM.

For the seventh year in succession, no disease due to this group of parasites was recognized in Swindon.

THE ACUTE INFECTIONS OF THE NERVOUS SYSTEM.

No encephalitis lethargica, no cerebro-spinal fever, one case notified as polio-encephalitis but which was measles and three cases of polio-myelitis, only one which was known in the acute stage, make up the list for 1935. The polio-myelitis cases occurred in a small epidemic in the last week in July. One case was recognized in the acute stage and removed to the Isolation Hospital where she recovered with some resulting paralysis. The two other cases which resulted in minor leg palsies were not discovered—although they were suspected—until later in the year. I believe these three cases are all that occurred, for at the time a particularly keen watch was kept for possible obscure or abortive cases and as the only two suspects were eventually tracked down, it is probable that there was nothing more to find. The three cases started their reaction in the same week, if not on the same day, but no direct connection between them could be traced.

MEASLES AND WHOOPING COUGH.

It is a blot on our public health system that measles and whooping cough are not notifiable, for we feel sure that with our system of health visiting we could reduce the toll of these diseases if we had immediate information of all cases. In the past eleven years, we have lost 71 children from measles and 96 from whooping cough. This is bad enough, but it is not all. Many of the most serious ear cases owe their origin to these infections; 'tonsils and adenoids'—genuine disease conditions, not specialists' perquisites—are more commonly due to them than to any other cause and a small number of damaged eyes, palsies and secondary amentias must be added to the measles and whooping cough toll. Lastly, juvenile asthma, a disease of increasing prevalence, is most frequently determined by whooping cough and not seldom by measles.

Probably everybody—or as near to it as makes no difference—who survives lactation goes through an attack of measles and of whooping cough. Much, however, is gained by delaying the diseases for their fatality rapidly declines with age. In the first three years of life both measles and whooping cough are serious diseases, after five years of age they are comparatively trivial. The reason why these diseases are so much more fatal in infants than in older children is an anatomical one—the relative diameters of the air tubes.

In theory we have an almost perfect preventive of damage from measles and, by the time this is printed, we may have an equally good theoretical remedy for whooping. In practice there are difficulties in administering these remedies, but these are not insuperable and in time will be overcome.

TUBERCULOSIS.

For England and Wales, the index of tuberculosis, *i.e.*, the number of deaths from the disease per million population, sunk in 1935 to the unprecedented level of 718. This is by far the lowest index ever recorded and is little more than half of what it was at the end of the War. Everywhere tuberculosis is diminishing and Swindon is no exception. Last year our index was 510, the lowest recorded except in 1929 when it was 440, but this was sandwiched between the high indices of 820 in 1928 and 840 in 1930. The notifications of tuberculosis in Swindon in 1935 did not differ much from those of the previous year, though there was a slight diminution in pulmonary tuberculosis amongst females.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, nor under Section 62 of the Public Health Act, 1925.

CANCER.

104 deaths, 57 in males and 47 in females, occurred from cancer in Swindon in 1935. This is a big increase on the last two years and gives the highest rate ever recorded in the borough. This is disappointing, for in the country as a whole there was a substantial drop in deaths from cancer in 1935. Our index for last year was 1735, against 1587 for the country as a whole. These are crude rates. How they will work out on standardization cannot be told at present.

GENERAL OBSERVATIONS ON VITAL STATISTICS.

The Registrar General estimates 60,400 as the population of Swindon in the middle of 1935. This is a drop of 433 on the population of 1934 and makes 1935 the fourth year in succession in which the population has fallen. In the middle of 1931 the population of Swindon reached its zenith at 62,700. Since then it has fallen by 2,300. This drop comes about from the balance of migration being against us, for though the birth rate during the past three years was exceedingly low, there was still a slight natural increase of population. Amongst other matters, this drop of 2,300 in the population means that we require roughly 500 houses less to harbour the population than we did in the census year.

In 1935, 379 males were born and 340 died, giving a net natural increase of 39 and 365 females were born and 294 died, giving a net natural increase of 71, so the natural increase of the population was 110. But as there was a drop in the actual population of 433, emigration exceeded immigration by 543, representing about 120 households. The birth rate for last year was 12.32, which is 2.5 below that of the great towns, 2.4 below that of the country as a whole and the lowest that has ever been recorded in the borough. For the last three years the birth rates for Swindon have been 12.48, 12.66 and 12.32. These are rates

of a decaying population ; but it must be born in mind that there has been considerable migration of town folk to the country area immediately surrounding the borough and it is possible that the whole population unit would not show the decline which is so marked in that part which is within the borough boundaries.

The stillbirth rate for Swindon last year was 0.52, the same as that for London and 0.12 below the average for the great towns. The crude death rate was 10.50, which is 0.66 below the average of the great towns and is the lowest recorded in the borough since 1928. The infant mortality was 47.04, the lowest recorded in the borough, with the exception of 1928, and 10 below that of the country as a whole. The maternal mortality in Swindon in 1935 was : sepsis 1.29, other causes 2.58, total 3.87. This is the highest rate recorded in Swindon for some years, but it is still slightly below that of England and Wales, which was 3.93. There were only 4 deaths from suicide and 14 from other violence ; both are low figures.

DUNSTAN BREWER,

Medical Officer of Health.

Public Health Department,
61, Eastcott Hill,
Swindon.

DIPHTHERIA IMMUNIZATION.

(By VICTOR R. WALKER, Deputy Medical Officer of Health.)

The increasing cognisance of this measure by the parents of Swindon combined with the raised incidence of clinical diphtheria within the Borough during the later months of 1935 have caused a marked increase in the number of children presenting themselves for immunization. Altogether 196 fresh children attended at Eastcott Hill for this purpose during the year. Of this number 192 received a preliminary Schick test for susceptibility to the disease, which was positive in 163 children, or 85% of cases. 141 children received a complete course of immunization and 26 more were in process of receiving such at the end of the year. Only 5 children for various reasons, including intercurrent illness, failed to present themselves for the full course, which is sufficient indication of the mild nature of the procedure. In addition, 48 children who had received a course of immunising injections six or more months before were re-tested and without exception all were Schick negative, which testifies to the efficacy of the immunising agent in use.

With the opening of the Pinehurst Clinic late in 1935, the same facilities were offered there as at Eastcott Hill, and with its intimation through the medium of the Infants' School in the last two months of the year 224 children were presented for this procedure. The preliminary Schick test performed on 209 children was positive in 193 or 92% of cases, and 101 susceptible children had received a complete course of immunization while 120 more were in process of so doing on 31st December, 1935. The fairly gratifying response in this area seems to show that there is little actual opposition to the procedure, and that a fairly large proportion of parents are willing to avail themselves of the protection offered if the time and trouble incurred in attendance is minimal. This encourages us to reduce the technique to the simplest and shortest form compatible with a high degree of efficiency. The immunising agent was unchanged, consisting of a course of three injections of Toxin Anti-toxin Mixture. The preliminary Schick test has now been dispensed with as a routine in children under 8 years, as from experience gained in Swindon such cases are almost always susceptible (*i.e.*, Schick positive) in the absence of a history of the recent occurrence of diphtheria in the home. Only one child showed reaction of the immunising material, a boy 11 years, who, on each of two injections of T.A.M. had considerable swelling at the site of inoculation. A positive Schick test at a later date was found negative+pseudo, indicating that the immunization had been successful, while his isolated case of reaction was due to a specific sensitivity to the protein element of the toxoid.

Two Schick positive children, aged 5 and 6 years, from the same street and the same Infants' school in which diphtheria infection was present, were admitted to Hospital with clinical diphtheria 8 and 9 days respectively after a first injection of T.A.M.—a dose and time interval much too short for any expectation of acquired immunity. It appeared likely, however, that the severity of the disease was somewhat modified in both cases. No other case occurred during immunization, and no case of clinical diphtheria has occurred to our knowledge within the Borough in an immunised child during the year.

All published work shows that a rapid fall in the incidence and fatality of diphtheria in the community as a whole can only be expected when a proportion of 60% or more of the child population at risk have developed an immunity, either natural through exposure to attack, or artificially (and at much less cost and suffering) by immunization. Thus our ultimate aim must be to immunise a high proportion of child population, preferably prior to entering infant school. This can only be obtained when the parents of Swindon become fully aware of the value of the measure and the relatively small amount of trouble which its performance entails.

Meanwhile, the proved results of immunization can be re-stated in plain language by affirming that while in the ordinary child population roughly one child in ten will take diphtheria and one child in a hundred will die, in an immunised group of children less than one in a hundred will suffer from clinical attack and the expectation of fatality will be infinitesimal. The optimum age for its execution is as soon as convenient after a child attains the age of eighteen months to two years, and certainly before entering the infant school.

SUMMARY.

No. of new patients attending during year	....	420
No. of preliminary Schick tests performed	....	401
" " "	Positive....	.... 356 = 88.8%
" " "	Negative	.... 45 = 11.2%
No. completing the course during the year	....	242
No. in process of receiving course at end of year	....	173
No. failing to complete course	....	5
No. of Posterior Schick tests ....	....	48
" " " negative ....	....	48 = 100%
Total attendances at Clinic ....	....	878

VICTOR R. WALKER,
Deputy Medical Officer of Health.

ISOLATION HOSPITAL, GORSE HILL.

ANNUAL REPORT

From 1st April, 1935, to 31st March, 1936.

ISOLATION HOSPITAL.

The Isolation Hospital year runs from the 1st April to the 31st March, and it is advisable to keep to this year, because, as the hospital caters for a large area outside the borough boundary its report could not be made to fit in entirely with the report for the borough, whereas, by carrying on the hospital year three months beyond the end of the calendar year it is possible to get a better retrospective view of the epidemiology of the last quarter and a break at the end of March is least disturbing to the history of epidemiology.

The hospital at present accepts for treatment persons suffering from any form of notifiable disease, except smallpox and tuberculosis, and also, at the discretion of the medical superintendent, from any infectious condition which is not notifiable. Also, for administrative reasons, it accepts cases of incomplete abortion, whether these are septic or not.

The hospital normally serves the Borough of Swindon and the rural districts of Highworth and Cricklade and Wootton Bassett, but it relieves other parts of the county should the local accommodation for infectious disease be overstrained. It also admits from districts other than its own, cases which are not normally admissible to the smaller fever hospitals, particularly cases of puerperal pyrexia.

BACTERIOLOGICAL DEPARTMENT.

Excluding the bacteriological and pathological work of the hospital itself, diphtheria swabs from the town and outlying districts are cultured and examined at Gorse Hill, as well as at the health office in Eastcott Hill. During the year 1935-36, 586 swabs were examined on behalf of the hospital, and 1,003 on behalf of Swindon borough and the surrounding rural sanitary authorities.

AMBULANCE SERVICE.

There is a twenty-four hour ambulance service for accidents, infectious cases and general medical cases. The fleet consists of one modified L.C.C. pattern ambulance on a Talbot chassis, an ambulance on a Morris Commercial chassis and an old ambulance on a Ford one ton chassis which is used mainly for the conveyance of articles to be disinfected and for the laundry. The ambulance service is run in conformity with Circular 1356 of the Ministry of Health.

Since Swindon is the only authority in the district that runs an ambulance service there is a considerable call upon it from neighbouring authorities and from persons in the neighbouring district acting either with, or without, authority. In 1935 the charges for the ambulance were revised, the chief alteration being that conveyance of persons to hospitals in the town shall be free in all cases. An arrangement was concluded between the town Council of Swindon and the rural districts of Highworth, and Cricklade and Wootton Bassett by which, for an annual payment the ambulance service for use in these two rural districts is placed on the same footing in most particulars as that for the town. Early in 1936, when the county council appropriated the hospital portion of the Institution at Stratton St. Margaret, the town council agreed to treat this hospital for ambulance purposes as though it were in the borough.

The ambulance service of Swindon is now adequate for the needs of the town and is generally satisfactory

During the year under review, the following journeys were made :—

Transport of infectious cases ....	....	....	491
Transport of non-infectious cases ....	....	....	693
Transport of bedding for disinfection and laundry articles ....	....	....	326

HOSPITAL SERVICE.

The number of new admissions during the year 1st April, 1935, to 31st March, 1936, was 527, against 710, 366, 412, 321 and 330 for the five preceding years.

On the 1st April, 1935, 34 patients remained under treatment in the hospital, so that altogether 561 cases were under treatment during the year. Of these :—

- 488 were discharged cured.
- 27 died, and,
- 46 remained in Hospital on 31-3-36.

The new admissions were received under the following notifications or descriptions :—

Scarlet Fever ....	....	....	252
Diphtheria ....	....	....	217
Pneumonia ....	....	....	22
Puerperal Pyrexia ....	....	....	9
Abortion ....	....	....	5
Erysipelas ....	....	....	8
Cerebro-spinal Meningitis ....	....	....	2
Polio-myelitis ....	....	....	1
Measles ....	....	....	10
Pleurisy ....	....	....	1

The 561 cases arranged according to their final diagnoses were :

Scarlet Fever	....	....	....	273
Scarlet Fever and Whooping Cough	....	....	....	1
Scarlet Fever and Rubella	....	....	....	1
Scarlet Fever and Congenital Syphilis	....	....	....	1
Diphtheria	....	....	....	177
Diphtheria and Scarlet Fever	....	....	....	7
Diphtheria and Nephritis	....	....	....	1
Diphtheria and Measles	....	....	....	1
Diphtheria and Rubella	....	....	....	1
Pneumonia	....	....	....	19
Puerperal Pyrexia	....	....	....	10
Baby with mother	....	....	....	1
Abortion	....	....	....	4
Erysipelas	....	....	....	7
Polio-myelitis	....	....	....	2
Measles	....	....	....	8
Measles and Rubella	....	....	....	1
Whooping Cough	....	....	....	1
Whooping Cough and Rubella	....	....	....	1
Rubella	....	....	....	9
Tonsillitis	....	....	....	19
Bronchitis	....	....	....	1
Glandular Fever	....	....	....	1
Septicaemia	....	....	....	1
Lymphadenoma	....	....	....	1
Pleurisy	....	....	....	3
Whitlow	....	....	....	1
Heat Stroke	....	....	....	1
Coccal Dermatitis	....	....	....	1
Undiagnosed Disease	....	....	....	1
No obvious disease	....	....	....	5

The 527 cases admitted during the year were chargeable to the following local authorities :—

Public Health Acts :—

Swindon Borough	....	....	....	429
Highworth Rural District	....	....	....	65
Cricklade and Wootton Bassett Rural District	....	....	....	19

Maternity and Child Welfare Act (Puerperal Cases) :—

Borough of Swindon	....	....	....	9
Wilts County Council	....	....	....	5

DIPHTHERIA.

Altogether there were 187 patients diagnosed as diphtheria. Of these 21 were still in hospital at the end of the year and are not included in the analysis that follows. This leaves 166 cases whose treatment was completed in the hospital year under review. Of these cases 13 were bacteriological only and 13 were nasal carriers, some of which did, but some of which did not, have symptoms which might have been reactions to diphtheria infection. These 26 cases were not clinical diphtheria, so they too are excluded from the following analysis. This leaves 140 cases of genuine clinical diphtheria. Of these 1 died in the ambulance and 4 were admitted moribund ; 9 were haemorrhagic cases, all but one of which died ; 6 were laryngeal cases, 2 requiring tracheotomy, all of which recovered, and the remaining 120 were pharyngeal cases.

Of the 140 cases, 18 died, giving a death rate of 13%. The deaths included the one that died in the ambulance, the four that were moribund on admission and eight of the haemorrhagic cases, so of the 127 cases who lived an appreciable time 4 only died, all from cardiac failure. The complications occurring in these 127 patients were as follows :—

- 29 cardiac failure,
- 13 palatal paralysis,
- 8 pharyngeal paralysis
- 11 paralysis of accommodation,
- 3 squint,
- 5 general paralysis
- 1 cystitis
- 3 nephritis, one of which was concurrent diphtheria and measles.

In addition, 12 cases developed otorrhoea and 1 rheumatism and endocarditis. Herpes was present in only one case.

- 1 was a second attack of diphtheria
- 7 cases were admitted with concurrent diphtheria and scarlet fever, and,
- 5 others developed scarlet fever, or something of the same nature, while they were in hospital.

The majority of the diphtheria was admitted in the latter half of the hospital year and from the list of complications it is obvious that we were dealing with a form of maximum severity. Some of the complications, such as the otorrhoeas and nephritis and the single case of endocarditis, were doubtless due to concurrent streptococcal disease and not primarily to diphtheria.

The occurrence of 7 cases of concurrent scarlet fever and diphtheria, both diseases clinically recognised as such, and 5 cases of diphtheria who subsequently developed scarlet fever, recognised as such, is not the whole story of combined streptococcus and corynebacterium reactions. In the outbreak in the latter part of the hospital year, there seems to have been a close symbiosis of these two organisms with their human host, which, though not uncommon, has not before been observed in Swindon during my tenure of office. Also, the nasal carriers are something new to the district. As I have mentioned in all my annual reports, chronic carriers of virulent corynebacterium do not occur in Swindon. The nasal cases of 1935-36 were not chronic carriers for they cleared up, which the true nasal carrier does not. Some of them cleared up at once—in other words they were ordinary nasal diphtheria, which is not infrequent—others continued for some time, but on virulence testing the organisms isolated were invariably non-virulent. Yet there is more than a suspicion that they set up diphtheria in others.

The diphtheria position towards the end of 1935 was such that it was clearly impossible to keep it in check and, as the form of the disease was one of extreme virulence, the only method of saving the population from the terrific toll of diphtheria was immunization. This was pressed with gratifying response and is dealt with in the body of the report. With the exception of one epidemic which occurred some 8 or 9 years ago, diphtheria in Swindon is always severe and this, I believe, to be connected with the absence of chronic carriers, but not before have we had to deal with an epidemic of such severity as that of 1935-36.

THE PNEUMONIAS.

Only 19 cases of pneumonia were treated in the Isolation Hospital during the year. Actually we were not in a position to admit many pneumonias owing to pressure of other infections. Fortunately, the pneumonic diseases were uncommon in the district during the year and the majority of those that did occur were of the terminal type which is of no public health importance. There was no epidemic pneumonia in 1935.

Of the 19 cases treated in the year under review, 1, a croupous case followed by empyema, was still in Hospital at the end of the year. Of those that were discharged, 6 were croupous pneumonia, of which one died; 8 were measles pneumonia, of which one died. 1, which recovered, developed empyema. 2 were whooping cough pneumonia, both of which recovered, and 2 were bronchopneumonia of uncertain type, of which one recovered and the other died almost immediately after admission.

PUERPERAL MORBIDITY.

The Isolation Hospital accepts all cases of puerperal pyrexia and cases of abortion, whether septic, or not. In the year 1935-6 the cases dealt with were :—3 cases of simple abortion ; 1 case of septic abortion and 1 case of premature delivery which was admitted as an abortion. Of the puerperal cases : 1 was a case of measles occurring in the puerperium, infected before delivery ; 1 was a case of scarlet fever, which was fatal from septicaemia and was probably infected at delivery ; 1 was a case of sub-acute rheumatism, occurring concurrently with the puerperium ; 1 was a fatal case of pneumococcal meningitis in which abortion occurred, the meningitis being the cause of the abortion ; 2 were cases of intra-uterine sepsis ; 1 was a case of white leg ; 1 was a case of ephemeral pyrexia occurring in the puerperium and 1 was a long case of puerperal pyaemia which eventually recovered.

SCARLET FEVER.

During the year we were dealing with the decline of a severe epidemic of scarlet fever in Swindon and the neighbourhood. The cases dealt with, 276, were considerably less than in the previous year, and, on the whole, were less mild and included many cases which were atypical.

Amongst the cases admitted as scarlet fever were : 2 in which the disease occurred immediately after tonsillectomy ; 2 cases from burns ; 3 cases occurring in connection with other surgical operations and 3 cases which appeared to have been infected by the bites of insects.

7 of the cases were admitted with concurrent diphtheria and 2 cases developed diphtheria when they were in hospital. 6 of the patients had had a previous attack of scarlet fever, the interval between the first and the second attack varying from about a month to several years. 3 of the patients had relapses. 1 case was admitted with concurrent whooping-cough and 1 with concurrent rubella. 1 developed rubella while in hospital.

The chief complications, other than otorrhoea, were as follows:—

Rheumatism	....	....	....	4
Endocarditis	....	....	....	2
Nephritis	....	....	....	5
Abscess of the neck	....	....	....	2
Ludwig's angina	....	....	....	1
Erythema nodosum	....	....	....	1

74 cases were treated with scarlet fever anti-toxin, intramuscularly. The cases treated with serum included all that were not apparently trivial on admission, so it is not fair to compare the cases treated with serum with those not so treated. However, as the result of several years use of serum, I am of the opinion that this agent is useful only to relieve toxæmia. The scarlet fever reaction, consisting of acute sore throat, rash, high pyrexia, high pulse rate, followed by strawberry tongue and skin peeling, seems to be a physiological reaction to the toxins of the pathogenic streptococci. These symptoms yield quickly to serum. But scarlet fever, as a clinical entity, consists of something more than this physiological reaction, namely, a potential, and often an actual, pathological reaction to the streptococci, evidenced by such symptoms as rhinorrhœa, otitis media, ulceration of the tonsils and the common late complications. These, in my opinion, are uninfluenced by serum.

Amongst the 276 cases of scarlet fever, there were 23 cases of otitis media which went on to suppuration and perforation of the drum. Of these, 12 had been treated with serum and 11 had not. 2 of the cases were treated by Wilde's incision and 1 by radical mastoid and 3 by ionisation. The results were a perfect clearing of the disease, with healing of the perforations in the drums in all cases, except the mastoid case, which was left with permanent sinus which has not healed up to date; the two cases with Wilde's incision which were discharged from hospital still discharging but which are now cured; one case in which the disease was cured, but the perforation of the drum is of such extent that it will never heal, and one case of persistent discharge which had existed before the scarlet fever, but which eventually healed some months after discharge from hospital. Though no deaths are attributed to scarlet fever, the puerperal case that died was scarlet fever and a child was admitted with streptococcal septicaæmia and who died a few hours after admission to hospital, which in all probability was scarlet fever.

Children who have had scarlet fever frequently develop acute tonsillitis; endocarditis, with, or without, rheumatism; nephritis and otitis media, at periods varying from three weeks to a year after the original fever. I am not certain whether or not these conditions are more common in children who have actually had notified fever than they are in children who have had no diagnosable scarlet fever, but they are certainly unduly prevalent in times of epidemic prevalence of scarlet fever—in other words, in the language of modern epidemiology, in periods when the pathogenic streptococci are dominant. These pathological states are of infinitely greater importance than scarlet fever itself and cause one of the gravest and most difficult problems in child rearing.

On the whole, I am of the opinion, that the shorter the stay in hospital after scarlet fever the less likely are these complications to develop after the child leaves hospital. I am coming to the conclusion that the mildest form of scarlet fever falls within normal physiological reaction ; that it is better without specific treatment and that the best management for it is a very brief stay in hospital. No doubt during the acute phase of scarlet fever dissemination of pathogenic streptococci is enhanced, so that isolation for a short period is salutary ; but the complex bacteriology of scarlet fever renders the segregation of many cases disadvantageous and what is gained from isolation during the acute stage is lost, and more than lost, by prolonged stay in hospital.

Allison Glover of the Ministry of Health has shown that it is impossible to differentiate clinical scarlet fever from other forms of acute tonsillitis which occur in times of epidemic prevalence. I am of opinion that it is impossible to differentiate child rheumatism from scarlet fever. On the surface it seems absurd to suggest that an acute exanthem lasting but a few days and accompanied by a characteristic clinical syndrome could have any intimate connection with a prolonged, indefinite, variable disease like child rheumatism ; but when the matter is considered from all points of view the essential similarity of the pathological processes involved leads to the conclusion that they are but forms of the same infection. The three major lesions : endocarditis, nephritis and pharyngitis spreading to the ears, are common to both. Some 25 years ago when working out the incidence of rheumatic heart disease in the school children in the West Riding of Yorkshire, I was struck by the number of cases which had a history of nephritis, and to the report which was published in the Archives of Disease in Childhood, in December, 1928, I added the following postscript :—

“ There is strong reason to suspect that acute nephritis in childhood is a rheumatic infection. The facts that by far the commonest of all causes of nephritis in childhood is scarlet fever; that the nephritis of scarlet fever is closely connected with post-scarlatinal rheumatism ; that there is no significant difference between post-scarlatinal rheumatism and rheumatism which is not post-scarlatinal, and the present fact that some 7 per cent. of cases showing acute endocarditis eventually ending in chronic heart disease are, at the time, suffering from acute nephritis, go some way to prove this contention.”

I should like to abandon the term ‘ scarlet fever ’ altogether and to remove scarlet fever from the list of specific diseases requiring notification. Many epidemiologists of the new school are in agreement with me here ; but I foresee that if scarlet fever ceased to be notifiable we should lose the most important instrument that we possess to enable us to determine the incidence and

variation of streptococcal disease. At some future date, when the principles of modern epidemiology become fully recognised, we shall obtain notification of disease on a different basis from that which rules at present, but I see little chance of this occurring in my life-time, for owing to the exceptional circumstances ruling in London, and to a less extent in other great cities, it is impossible to study epidemic phenomena in the great centres of population where medicine is taught and which must rule current medical practice.

RETURN CASES.

A return case is defined as a case of any disease of a presumed infectious character occurring within 28 days in a household to which has returned a case of any infectious disease treated in an isolation hospital, or isolated at home. As in Swindon practically all cases of infectious disease are removed to hospital, we need only bother about returns to hospital from a household to which a case has been discharged from the hospital. In former days the belief was (and in most quarters it still is) that the cause of return cases was the discharge from hospital of patients who are still infectious, which has been extended to the proposition that the cause of return cases is the discharge of patients before they are ready for discharge. My own opinion is that this is erroneous and that the phenomenon of the return case is explicable in a totally different manner. Without entering into discussion upon the matter here, I wish to draw attention to four phenomena in connection with the return case.

- (1) The percentage of return cases has no connection with the severity of the original case, nor with the length of stay in hospital, and is neither more nor less common in cases recognised and treated in hospital than in cases which are not recognised until they begin to peal some weeks after the original reaction.
- (2) Return cases are comparatively rare in urban practice, but are common in rural practice, particularly in isolated villages.
- (3) For all practical purposes the return case phenomenon is limited to scarlet fever, and,
- (4) The percentage of return cases varies enormously in different phases of the epidemic cycle.

In the year under review 20 cases of alleged returns were investigated. Of these 6 can be excluded, for they are cases in which the disease of the alleged infector had no connection with that of the alleged infectee. The remaining 14 cases were cases in which both the alleged infector and the alleged infectee suffered from scarlet fever.

The alleged infectors also number 14. Of these 9 had had scarlet fever of the mildest description, none of whom was treated with serum. 4 were scarlet fever of moderate degree treated with serum and 1 was a case that had had diphtheria and not scarlet fever. 3 of these cases were from the rural district ; 4 were scattered through the town and 4 were from one part of the town abutting on the rural district. Of the 14 infectees, 5 came from adjoining houses in what at the time was the central focus of the epidemic ; 3 came from rural districts and the other 6 came from four houses in various parts of the town. The return case rate was 5%. As mentioned in last year's report, before the epidemic of scarlet fever started the expectation was worked out to be 6 per cent. of those at risk ; so the return case rate for last year is below the expected rate. I am not suggesting that some cases of scarlet fever do not retain the power of infection after leaving hospital. Some of them unquestionably do retain this power for months, or years, and occasionally throughout life. But I believe that these cases have little or nothing to do with the return case rate.

DUNSTAN BREWER,

Medical Supt., Isolation Hospital.

Public Health Department,

61, Eastcott Hill,

Swindon.

BOROUGH OF SWINDON.

GENERAL STATISTICS.

Area (acres)	....	....	....	6062
Population : Census 1931	....	....	....	62401
Estd. middle of 1935	....	....	....	60400
Number of inhabited houses (1935)	....	....	....	16718
Rateable Value (General Rate)	....	....	£	343,051
Sum represented by a penny rate	....	....	£	1,380

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total	M.	F.	
Births :	Legitimate	716	363	353
	Illegitimate	28	16	12
				Birth Rate 12.32
Stillbirths :	Legitimate	29	13	16
	Illegitimate	2	2	—
				Stillbirth Rate per 1000 births (Live and Still) 40.0
Deaths	....	634	340	294
				Death Rate 10.50

Number of women dying in, or in consequence of childbirth :—
Rate per 1,000 births (Live & Still) :—

From sepsis	....	1	1.29
From other causes	....	2	2.58
Total	—	3	3.87

Deaths of Infants under one year of age per 1,000 live births :—
Legitimate 44.69 Illegitimate 107.14 Total 47.04

Number of deaths from Measles (all ages)	....	....	6
„ „ „ Whooping Cough (all ages)	....	....	2
„ „ „ Diarrhoea (under 2 years of age)	....	....	1

INFECTIOUS DISEASE.

Table showing the numbers of Infectious Diseases notified in the Borough during the year 1935.

Disease	Cases notified at various ages. (Years)										No. of cases admitted to Hospital.	Total Deaths.		
	Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and upwards		
Smallpox	...	...	...	1	4	...	76	31	13	14	...	...	153
Diphtheria	...	...	1	...	4	...	9	1	3	1	...	9	4
Erysipelas	...	...	...	4	11	18	28	127	40	7	6	...	246
Scarlet Fever	...	...	...	...	...	...	...	...	...	5	...	...	3†
Ophthalmia Neonatorum	5	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	11	11	7	19	4	6	12	27
Pneumonia	...	8	13	11	11	7	...	...	...	...	15	150	20
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	...	...	...	...	...	...	...	...	...	3	3	...	29
Puerperal Fever	...	2	...	...	...	...	...	1	...	3	3	...	9
Polio-myelitis	...	...	...	...	...	...	...	...	...	...	...	...	1
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio-encephalitis	...	...	...	...	...	...	...	...	...	1	1	...	...
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis—														
(a) Pulmonary	M	...	...	1	...	...	...	...	1	2	7	4	21
	F	...	...	...	...	...	...	...	3	6	2	4	16
Total	...	...	...	2	...	...	...	...	...	...	...	...	37
(b) Non-Pulmonary	M	...	...	...	...	...	...	...	2	4	1	1	9
	F	...	...	...	...	...	...	...	...	8	1	...	13
Total	...	...	...	...	...	...	...	...	...	...	...	...	22
TOTALS	...	14	21	28	34	45	225	76	36	84	33	44	16	656
														423
														73

† 1 of these cases who died at home was notified the previous year.

TABLE SHOWING MONTHLY INCIDENCE OF INFECTIOUS DISEASES AND THE NUMBER OF DEATHS
DURING 1935.

DISEASE.	NUMBER OF CASES.											No. of Deaths.		
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	No. of Deaths.
Smallpox	...	...	...	5	10	4	9	9	...	...	29	153	9	...
Diphtheria	16	10	6	5	1	3	1	9	30	16	1	10	...	...
Erysipelas	...	1	2	1	18	13	26	28	16	23	14	14	246	3†
Scarlet Fever	...	32	33	10	...	...	1	2	...	...	...	5	5	...
Ophthalmia Neonatorum	...	...	1	...	...	...	...	...	...	...	...	...	150	29
Dysentery	...	...	...	...	...	20	19	4	6	8	11	7	...	...
Pneumonia	5	24	16	15	...	...	...	...	...	...	...	2	1	29
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Encephalitis Lethargica	...	...	3	3	4	...	...	2	2	1	5	...	...	...
Puerperal Pyrexia	2	...	...	...	...	...	...	...	...	...	1	...	1	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	1	...	3	...
Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Polio-encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	55	72	37	43	43	57	39	46	34	75	44	52	597	42

† 1 of these cases who died at home was notified the previous year.

TUBERCULOSIS, 1935.

Age Periods	NEW CASES				DEATHS			
	Pulmonary		Non-Pulm'ry		Pulmonary		Non-Pulm'ry	
	M	F	M	F	M	F	M	F
Under 1 year ....	....	....	....	....	....	....	....	....
1—5 ....	....	1	2	1	....	....	....	....
5—10 ....	....	....	....	....	2	....	....	....
10—15	1	....	1	1	....	....	....	....
15—20	2	2	2	1	1	2	....	1
20—25	2	5	1	1	2	1	....	....
25—35	8	3	4	5	2	3	....	2
35—45	4	2	1	1	3	2	....	1
45—55	5	1	1	1	2	3	....	....
55—65	2	2	....	....	4	1	1	....
65 and over ....	....	....	....	....	....	....	....	....
TOTALS	24	16	12	13	14	12	1	4

DEATHS FROM TUBERCULOSIS, 1935.**TABLE SHOWING WHEN CASES WERE NOTIFIED.**

When Notified.	Pulmonary		Non-Pulmonary	
	Males.	Females	Males.	Females
One year or more before death	6	5	....	2
Less than one year and more than 6 months before death	2	3	1	....
Less than six months and more than two months before death	1	....	....	....
Less than two months before death	1	2	....	1
At or immediately before death	3	2	....	1
Unnotified (Cases who died outside the Borough & never notified to Swindon).	1	....	....	....
TOTALS	14	12	1	4

Comparative statement showing the number of notifications received of the various forms of Tuberculosis and
the Death Rates resulting from each form of the disease for the years 1916-1935.

	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916
No. of cases notified (all forms)	65	73	79	88	80	86	98	114	102	94	91	111	117	103	98	97	73	116	129	132
Respiratory Tuberculosis	40	42	53	62	52	41	57	69	70	56	66	75	75	68	63	72	51	86	102	95
Deaths from Respiratory Tuberculosis	26	28	35	41	40	37	23	40	45	30	42	42	48	59	42	55	44	66	60	48
Deaths from Tuber.Meningitis	1	5	1	5	3	3	3	6	1	8	5	4	12	6	11	8	8	11	8	10
Deaths from other forms of the disease	4	4	3	7	3	12	1	2	9	3	4	7	7	6	12	6	8	11	10	10
Total deaths from Tuberculosis	31	37	39	53	46	52	27	48	55	41	51	53	67	71	65	69	60	88	78	68
General Death Rate for all forms of Tuberculosis	0.51	0.61	0.64	0.85	0.73	0.84	0.44	0.82	0.96	0.71	0.89	0.93	1.19	1.27	1.17	1.28	1.16	1.74	1.5	1.3
Death Rate for Respiratory Tuberculosis	0.43	0.46	0.57	0.66	0.64	0.60	0.37	0.68	0.78	0.5	0.73	0.74	0.85	1.05	0.75	1.02	0.85	1.30	1.15	0.95

TABLE SHOWING THE DISTRIBUTION OF INFECTIOUS DISEASE IN
THE VARIOUS WARDS OF THE TOWN DURING THE YEAR 1935.

DISEASE.	WARD.						TOTAL.
	North	South	East	West	King's	Queen's	
Diphtheria	28	15	34	20	36	20	153
Scarlet Fever	79	30	19	67	30	21	246
Pneumonia	41	27	16	20	23	23	150
Pulmonary Tuberculosis	9	7	7	7	4	6	40
Other forms of Tuberculosis	7	3	6	2	2	5	25

INFANT MORTALITY IN THE SIX WARDS OF THE BOROUGH.

WARD.	NO. OF BIRTHS.	NO. OF INFANT DEATHS.	INFANT DEATH RATE PER 1,000 LIVE BIRTHS.
NORTH	199	8	42.10
SOUTH	82	4	48.78
EAST	109	2	18.35
WEST	156	8	51.28
KING'S	121	10	82.64
QUEEN'S	86	3	34.88
Total for Borough	744	35	47.04

BACTERIOLOGICAL INVESTIGATIONS.

	PUBLIC HEALTH DEPT.				SCHOOL MEDICAL DEPT.				1935
	1931	1932	1933	1934	1935	1931	1932	1933	
Examinations carried out by Bristol or Liverpool Universities	15	18	8	28	17	...	...	...	1
Examinations carried out at Gorse Hill Hospital :	482	786	785	760	586	...	...	...	...
Throat swabs examined	...	...	...	...	...	...	...	...	...
Urine : Examination for Tubercle bacilli	...	...	...	...	...	...	...	...	...
Examinations carried out at 61 Eastcott Hill :—	852	1216	1164	488	1003	73	33	34	31
Throat swabs examined	...	...	50	36	40	...	...	...	...
Eyes ; swabs examined direct	43	...	...	...	...	...	...	...	...
Pus and discharges :—	5	4	4	2	3	1	...	4	2
For Tubercle bacilli	...	...	9	47	27	15	7	...	...
For other organisms (cultures)	...	...	...	...	...	...	...	...	...
Hair. Examinations for Ringworm fungus	6	...	...	...	...	1	...	...	...
Other conditions	...	...	...	...	...	13	5	...	...
Blood, Histological examinations	27	27	13	...	...	...	...	...	...
Blood for Wassermann-Reaction	...	...	1	4	6	8	1	...	...
Cerebro-spinal fluid	...	...	...	...	...	2	...	...	...
Sputum. For Tubercle bacilli	...	...	...	...	...	...	...	...	...
For other organisms	...	...	...	...	...	...	...	...	...
Urine-Chemical examinations	22	20	13	17	20	8	12	28	13
" Microscopical examinations	18	14	2	9	7	7	8	14	7
" Bacteriological examinations	...	...	...	...	...	...	...	...	...
For diseased meat	2	...	...	2	1	...	1	...	...
Miscellaneous	3	...	...	2	1	...	13	...	...
TOTALS	...	...	1485	2186	2060	1380	1691	232	264
								280	115

80

No. of samples of water submitted for chemical and bacteriological analysis during 1935 . 26

No. of samples of sewage effluent submitted for chemical examination during 1935 12

REVIEW OF THE COMPARATIVE VITAL AND MORTALITY
STATISTICS FOR THE BOROUGH OF SWINDON, TOGETHER
WITH THOSE FOR ENGLAND AND WALES FOR THE
YEARS 1901 TO 1935 INCLUSIVE.

Year	BIRTH RATE		DEATH RATE		INFANT MORTALITY RATE		Illegitimate Death Rate
	Swindon	England and Wales	Swindon	England and Wales	Swindon	England and Wales	
1901	30.6	28.5	11.8	16.9	102.9	151	—
1902	28.3	28.5	12.7	16.3	104.7	133	—
1903	29.5	28.5	11.27	15.5	106.9	132	—
1904	30.0	28.0	12.49	16.3	111.2	145	—
1905	28.4	27.3	11.2	15.3	95.4	128	—
1906	29.4	27.2	9.9	15.5	86.2	132	—
1907	28.8	26.5	12.3	15.1	91.8	118	—
1908	28.9	26.7	11.8	14.8	101.5	120	—
1909	26.5	25.8	10.8	14.6	78.2	109	—
1910	23.4	25.1	9.7	13.5	86.8	105	—
1911	21.6	24.3	10.9	14.6	103.1	130	—
1912	23.4	23.9	10.3	13.3	76.3	95	—
1913	23.39	24.1	12.08	13.8	86.4	108	—
1914	22.5	23.8	11.5	14.0	73.7	105	—
1915	21.16	21.9	12.83	15.7	67.7	110	—
1916	18.9	20.9	11.3	14.4	72.4	91	—
1917	15.5	17.8	12.25	14.4	88.6	96	—
1918	16.53	17.7	15.13	17.6	81.3	97	129.63
1919	16.86	18.5	11.97	13.8	83.9	89	79.52
1920	23.25	25.4	11.64	12.4	69.0	80	122.44
1921	20.27	22.4	9.58	12.1	67.5	83	102.56
1922	18.98	20.6	12.17	12.9	60.5	77	121.95
1923	17.77	19.7	9.27	11.6	53.2	69	83.33
1924	17.11	18.8	10.78	12.2	63.01	75	192.30
1925	16.56	18.3	11.09	12.2	60.5	75	52.63
1926	17.09	17.8	10.67	11.6	47.95	70	193.54
1927	14.52	16.7	11.16	12.3	46.98	69	107.14
1928	15.63	16.7	9.92	11.7	36.26	65	51.28
1929	13.98	16.3	10.96	13.4	47.29	74	32.26
1930	15.66	16.3	10.77	11.4	62.82	60	157.89
1931	14.51	15.8	10.88	12.3	56.04	66	136.36
1932	14.31	15.3	11.68	12.0	52.99	65	37.04
1933	12.48	14.4	11.06	12.3	52.22	64	66.67
1934	12.66	14.8	11.11	11.8	55.84	59	115.38
1935	12.32	14.7	10.50	11.7	47.04	57	107.14

BOROUGH OF SWINDON.

CAUSES OF DEATH, 1935.

(Registrar-General's Official Returns).

CAUSES.	Males	Females	Total
Measles	2	4	6
Scarlet Fever	1	2	3
Whooping Cough	1	1	2
Diphtheria	6	3	9
Influenza	2	4	6
Respiratory Tuberculosis	14	12	26
Other Tuberculosis	1	4	5
General paralysis of insane, etc.	2	—	2
Cancer	57	47	104
Diabetes	1	4	5
Cerebral haemorrhage	25	25	50
Heart disease	87	87	174
Aneurysm	1	—	1
Other circulatory	15	6	21
Bronchitis	13	5	18
Pneumonia	11	5	16
Other respiratory	5	1	6
Peptic ulcer	5	2	7
Diarrhoea &c. (under 2 years).	1	—	1
Appendicitis	2	1	3
Cirrhosis of liver	1	—	1
Other liver diseases	1	1	2
Other digestive	9	10	19
Nephritis	9	12	21
Puerperal sepsis	—	1	1
Other puerperal	—	2	2
Congenital causes, etc.	16	11	27
Senility	15	18	33
Suicide	4	—	4
Other violence	9	5	14
Other defined causes	24	21	45
All causes	340	294	634

BOROUGH OF SWINDON.

INFANT MORTALITY.

1935. *Nett deaths from stated causes at various ages under One Year of Age.*

COMPILED FROM THE OFFICIAL REGISTRATIONS.

CAUSE OF DEATH.	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 1 month.	1—3 months	3—6 months	6—9 months	9—12 months	Total Deaths under 1 year.
All Causes—										
Certified	23	3	...	1	27	4	1	1	2	35
Uncertified ....	....	....	....	....	....	....	....	....	....	....
Measles ....	....	....	....	....	....	....	....	....	....	....
Whooping-cough ....	....	....	....	....	....	....	....	....	....	....
Diphtheria ....	....	....	....	....	....	....	....	....	....	....
Influenza ....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of nervous system ....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of Intestines and Peritoneum ....	....	....	....	....	....	....	....	....	....	....
Other Tuberculous Diseases ....	....	....	....	....	....	....	....	....	....	....
Syphilis ....	....	....	....	....	....	....	....	....	....	....
Meningitis ....	....	....	....	....	....	....	....	....	....	....
Convulsions	1	....	....	....	1	....	....	....	....	1
Bronchitis ....	....	....	....	1	1	....	....	....	1	2
Pneumonia ....	....	....	....	....	1	1	1	1	1	4
Other Respiratory Diseases ....	....	....	....	....	....	....	....	....	....	....
Inflammation of the Stomach ....	....	....	....	....	....	....	....	....	....	....
Diarrhoea and Enteritis ....	....	....	....	....	....	1	....	....	....	1
Hernia, Intestinal Obstruction ....	....	....	....	....	....	....	....	....	....	....
Congenital Malformations	5	....	....	....	5	2	....	....	....	7
Congenital Debility and Sclerema	3	....	....	....	3	....	....	....	....	3
Icterus ....	....	....	....	....	....	....	....	....	....	....
Premature Birth	12	2	....	....	14	....	....	....	....	14
Injury at Birth ....	....	....	....	....	....	....	....	....	....	....
Disease of Umbilicus ....	....	....	....	....	....	....	....	....	....	....
Atelectasis	1	....	....	....	1	....	....	....	....	1
Suffocation ....	....	....	....	....	....	....	....	....	....	....
Hæmolytic Jaundice ....	....	1	....	....	1	....	....	....	....	1
Asphyxia Neonatorum	1	....	....	....	1	....	....	....	....	1
TOTALS	23	3	...	1	27	4	1	1	2	35

**LIST OF HOSPITALS PROVIDED OR SUBSIDISED BY
THE LOCAL AUTHORITY OR BY THE COUNTY COUNCIL.**

TUBERCULOSIS.	Two beds at Winsley Sanatorium, near Bath, provided by the local authority. The Wilts County Council has two sanatoria for the treatment of tuberculosis ; one at Winsley for early cases and the other at Harnwood near Salisbury, for advanced cases.
MATERNITY.	A Maternity Home of 24 beds provided by the local authority.
CHILDREN.	Nil.
FEVER.	A fever hospital of 70 beds provided by the local authority.
SMALLPOX.	A Smallpox Hospital provided by the Wilts County Council.
VENEREAL DISEASES.	A hospital with 6 beds provided by the Wilts County Council.
ORTHOPAEDIC.	Use of beds in Bath Orthopaedic Hospital.

Maternity and Child Welfare	61, Eastcott Hill	Mondays, Wednesdays and Fridays 2 p.m. to 4.30 p.m. Wednesdays 2 p.m. to 4.30 p.m.	Swindon Corporation
Maternity and Child Welfare	Pinehurst Clinic, Beech Avenue	Tuesdays, 2 p.m. to 4 p.m.	"
Maternity and Child Welfare	Girls' Club, St. Paul's St. Methodist School, Romsey Street	Thursdays, 2 p.m. to 4 p.m. Mondays, 6 to 7 p.m.	"
Ante-Natal Clinic	37, Milton Road	Tuesdays, Thursdays (G.W.R. cases) & Fridays, 2 to 4.30 p.m. Second & Fourth Wednesdays in each month at 2.30 p.m.	"
Consultation Ante-Natal Clinic	Maternity Home, Kingshill	Every morning 9 to 11 o'clock	"
Minor Ailments	61, Eastcott Hill	Daily 9.30 a.m. to 12.30 p.m., and 2 p.m. to 5 p.m.	"
Minor Ailments	Pinehurst Schools, Beech Avenue	(Saturdays 10 a.m. to 12.30 p.m.)	"
Dental Clinic	Wesley Schools, Farnsby Street	Daily 9.30 a.m. to 12.30 p.m. and 2 p.m. to 5 p.m. (Weds. excepted)	"
Dental Clinic	Pinehurst Clinic, Beech Avenue	Saturdays 10 a.m. to 12.30 p.m.	"
Eye Clinic	61 Eastcott Hill	Tuesdays, 2 p.m. to 4.30 p.m.	"
Ringworm Clinic	"	Thursdays, 2 p.m. to 5 p.m.	"
Nose, Throat and Ear Clinic	"	Mondays, 2 p.m. to 5 p.m.	"
Medical Officer's Special Clinic	"	Thursdays, 2 p.m. to 5 p.m.	"
X-Ray Clinic	"	Thursdays, 2 p.m. to 5 p.m.	"
Electrical Treatment (General)	"	Wednesdays, 2 p.m. to 4 p.m.	"
Electrical Ionization Clinic	"	Fridays, 2 p.m. to 4.30 p.m.	"
Observation Clinic	"	Saturdays, 9.30 a.m. to 12 noon	"
Tuberculosis Clinic	Tuberculosis Dispensary, Milton Road	Thursdays, 10 a.m. to 3 p.m.	Wilts County Council
Venereal Diseases Clinic	Isolation Hospital, Gorse Hill	Men—Wednesdays, 7.0 to 8.30 p.m. Fridays, 6 p.m. to 7.30 p.m.	"
Orthopaedic Clinic	Grounds Gorse Hill	Women and Children :— Mondays, 5 p.m. to 6.30 p.m. Fridays, 2 p.m. to 3.30 p.m.	"
		Tuesdays, 2 p.m. to 3.30 p.m.	Voluntary Association

AMBULANCE FACILITIES.

-
- | | | |
|-----------------------------------------------|---|---------------------------------------------------------------------------------------------------|
| (a) For Infectious Diseases. | } | Three Motor Ambulances, giving
a 24 hour service, are supplied by
the Swindon Town Council. |
| (b) For non-infectious and
accident cases. | | |
-

LIST OF LOCAL ACTS, SPECIAL LOCAL ORDERS AND GENERAL ADOPTIVE ACTS IN FORCE IN THE DISTRICT.

LOCAL ACTS AND ORDERS.

Swindon Water Act, 1894.

Swindon New Town Electric Lighting Order, 1895.

Swindon (Water) Orders of 1902 and 1919.

The Swindon Corporation Act, 1904.

Swindon Corporation (Wilts and Berks Canal Abandonment)
Act, 1914.

The Swindon Order, 1923.

The Swindon Order, 1925.

Swindon Corporation Act, 1926.

The Swindon Order, 1927.

The Swindon (Extension) Order, 1928.

The Swindon Electricity (Extension) Special Order, 1929.

Public Works Facilities Scheme (Swindon Corporation) Act,
1931.

The Swindon Roads (Restriction) Order, 1935.

ADOPTIVE ACTS IN FORCE.

Date of Adoption.

The Public Health Acts Amendment
Act, 1890.

11th Nov., 1890.

Infectious Diseases (Prevention) Act,
1890

11th March, 1902.

The Museums and Gymnasiums Act,
1891 (so far as it relates to
museums)

6th June, 1905.

The Local Government and Other
Officers' Superannuation Act, 1922

1st May, 1924.

THE PUBLIC HEALTH ACTS AMENDMENT ACT, 1907 :—

Part III., Secs. 36, 37, 49, 50, and 51

Part IV., Secs. 62, 64 and 65

Part VII., Sec. 85.

Part X., Sec. 93.

7th Dec., 1926.

THE PUBLIC HEALTH ACT, 1925. :—

Part II. (except Secs. 20, 24 and 29).

Part III.

Part IV.

Part V.

7th Dec., 1926.

APPENDIX.

BOROUGH OF SWINDON.

ANNUAL REPORT

OF THE

Chief Sanitary Inspector

F. H. BEAVIS

For the Year 1935

To the Chairman and Members of the Health, etc., Committee.

LADIES AND GENTLEMEN,

I have the honour of submitting my tenth Annual Report dealing with the work carried out by the Sanitary Department during the year ended 31st December, 1935.

Appended hereto will be found the tables giving full particulars of the inspections made during the year in conformity with the requirements of the Ministry of Health.

During the year there was no change in the staff of the Sanitary Department, but in June Mr. G. E. Williams was appointed as a temporary Assistant Sanitary Inspector for the purposes of carrying out the Survey under the Housing Act, 1935.

MILK SUPPLY.

Wiltshire is noted for its milk production, and we are surrounded by an agricultural district in which milk is produced in sufficient quantities not only to supply Swindon with all its needs and to furnish the Metropolis with practically one-third of its requirements, but there is still a surplus sufficient for cheese-making and for the manufacture of dried milk in considerable quantities. Consequently, the inhabitants of the Borough obtain their milk in a fresh condition with very little handling and within a few hours of its production.

During the year much useful work has been done to encourage the production of clean milk. Samples are taken in course of delivery and sent to Bristol University for bacteriological examination. The results of this examination are set out in a table appended hereto. The source of any sample which is not satisfactory is at once enquired into, and steps are immediately taken to ensure an improvement. All cases from outside the Borough are referred to the Officer in whose district the milk was produced, who then visits the farm and takes the necessary steps to ensure cleanliness. This arrangement is working quite satisfactorily, as it enables us not only to deal with our own farmers but also with those who are outside the Borough.

In addition to the samples taken for bacteriological examination, your Inspectors also visit the farms whilst milking is in progress, and by means of a sediment test can demonstrate to the milkers how clean milk can be produced and bacterial counts reduced to a minimum.

During the year there were no Police Court proceedings relating to milk, which is very satisfactory and goes to show that the dairymen and others engaged in handling the people's milk supply realise their responsibility to keep it as pure as possible.

The bulk of the milk at present sold in Swindon is "Grade A" in quality, being produced under the accredited scheme for "Grade A" producers. This is very satisfactory, and shows that the general public prefer clean, raw milk to milk which has been subjected to any form of treatment.

The taking of samples of "Grade A (Tuberculin Tested)" milk has been delegated to the Town Council by the Ministry of Health. During the year twelve samples were taken, only one proving to be unsatisfactory. Steps were immediately taken by your Inspector to improve matters, and the remainder of the samples were quite satisfactory.

One farm, one bottling establishment, one dairy and two retailers from outside the Borough are licensed for the production or distribution of "Grade A (Tuberculin Tested)" Milk. Eleven farms, two bottling establishments and three milk shops are licensed for the production or distribution of "Grade A" milk. There are five retailers who are licensed to sell "Pasteurised" Milk, and two licences have been issued for the pasteurisation of milk within the Borough. There is one retailer from outside the Borough, who possesses a supplementary licence to sell "Grade A (Tuberculin Tested)" Milk within the Borough, who also sells "Grade A" and "Pasteurised" Milk.

FOOD SUPPLY.

The inspection of Swindon's food supply is by no means an easy task. Your Inspector and his Assistants are kept working at high pressure during the year in trying to cope with this and other work carried out by the Department. As will be readily understood, this work entails very long and irregular hours, so as to enable us to exercise that control which is so essential to ensure to the inhabitants a pure and wholesome food supply. Much of this work must necessarily be done after the office is closed, but food has such a direct influence upon the health and well-being of the community that no effort is spared so long as we can accomplish our object.

During 1935, 15,089 animals were slaughtered within the Borough for human consumption, every one of which was seen by your Inspectors previous to being offered for sale. The word food, however, includes practically everything used for the food of man, and constant watchfulness is necessary so as to ensure that all these articles of food are kept up to the required standard.

Police Court Cases relating to unsound food were conspicuous by their absence, and notwithstanding the strict supervision exercised over all food shops, not one single case was discovered during the year.

The question of a public abattoir is still in abeyance, but it must be fairly obvious to everyone that adequate meat inspection can only be carried out in such an institution. Absolute cleanliness and strict supervision are essential in dealing with this work, and an up-to-date public abattoir is the only place where these can properly be attained.

Small shops and fish-frying establishments where cooked food is sold still continue to increase, and although these premises are kept under constant observation by your Officers and every effort is made to ensure absolute cleanliness, it would be greatly to the advantage of the general public if all premises where food is prepared or sold were required to be registered or licensed by the Local Authority.

The unsound food amounted to just over eighteen tons. This is a slight increase over last year's figure, but the quality of meat, etc., sold in Swindon has been maintained.

Appended hereto will be found the tables showing the work carried out under the Public Health (Meat) Regulations, 1924.

CASEOUS LYMPHADENITIS.

No cases of this disease were found in imported mutton during 1935.

HOUSING.

The housing problem is gradually solving itself, but the question of rents is still acute, because the rents of the newer properties are much too high for the poorer section of the community, who are really the people requiring to be re-housed. If it were possible to build houses with sufficient accommodation which could be let at from 7/- to 10/- per week inclusive, I am of opinion that the problem would be solved.

During the year, 3 houses were erected by the Corporation and 240 by private enterprise, making a total of 243 houses erected during the year.

TENTS, VANS AND SHEDS.

There are still one or two caravans in the Borough which are being used for human habitation, but very little trouble regarding them has been experienced during the past year. Every effort was made to ensure that no nuisance arose, and the bye-laws relating to these dwellings are strictly enforced. The solution of the problem regarding these structures would appear to be some form of legislation giving Local Authorities power to prohibit their use in towns of over 30,000 population.

THEATRES, CINEMAS, ETC.

There are at present one theatre, six cinemas, one billiard hall and twenty-three dancing halls licensed within the Borough, besides which there are five premises licensed for music and singing only. These buildings are regularly visited by your Inspectors so as to ensure their being kept in a cleanly and sanitary condition.

DISINFECTION OF VEHICLES AT THE CATTLE MARKET.

The disinfection of vehicles used for the conveyance of animals at the Cattle Market is carried out under the direct supervision of the Sanitary Department. A small charge is made by the Corporation for this service, and a table is appended showing the particulars of the receipts and expenditure incurred during the year 1935. It should be clearly understood, however, that this table is not an accurate statement so far as profit and loss is concerned, as it does not include the cost of collection, disinfectants, plant, etc., but only gives the amounts expended on casual labour. The scheme which was adopted at the end of 1933, whereby unemployed persons are engaged temporarily on this work, is still working satisfactorily.

DRAINAGE WORK.

During the year, the drains of 289 houses were either relaid or overhauled, under the direct supervision of your Inspector. This work is of the utmost importance, as several of the drains, when exposed, were so bad and leaky that the water-carriage system had entirely failed, and the drains had filled practically solid. In another part of the Borough certain houses were drained into a cesspool which had been a source of nuisance for several years, and your Inspector was successful in persuading the owners to instal a small sewage purification plant, at a cost of about £300, the effluent from which discharges into the River Ray. Up to the present this plant is working very satisfactorily.

RATS AND MICE DESTRUCTION.

1935 was a peculiar season so far as rats and mice were concerned. Although the usual exodus occurred at the Tips during the summer, a considerable number of these rodents remained. This enabled us to keep the pests under control, but there was a great influx early in the autumn, which called for more drastic action. During Rat Week your Committee authorised me to employ an extra man specially for this work, when excellent results were obtained.

A perusal of the table under this heading will show that over 6,000 rats were accounted for during the year, and that much useful work is being accomplished.

GENERAL.

1935 was again a busy year in the Sanitary Department. New streets and houses are in course of construction in several parts of the Borough, which is a very healthy sign and shows that progress is being made. But this progress adds a little more work to the already numerous duties of the Department.

There are still several houses which are drained into cesspools, and these invariably gave rise to nuisances when they were emptied. Early in the year, however, your Committee decided to empty these cesspools, on the request of the owners or occupiers, at a nominal fee, and since then very little trouble has been experienced from this source.

There are several swimming-pools in the Borough which are privately owned, and these were kept under supervision during the season, and samples of the water taken periodically. Whilst some of these samples were found to be quite satisfactory, others were not above suspicion. However, this matter will probably be dealt with in the near future.

There are several water-closets not fitted with flushing-cisterns, but this matter is receiving attention, and the water-closets are gradually being brought up-to-date.

The provision of a properly covered sanitary dust-bin for every house is very desirable from a public health point-of-view, but unfortunately there are still a few houses where old boxes, baths, etc., are being used for this purpose.

The issue of free disinfectant to the poorer class of the community was re-organised during 1933, owing to certain abuses. The method then adopted is working very satisfactorily, and whilst no genuine applicant is refused, we have been able to eliminate the abuses and waste, and have reduced the total amount of disinfectant issued by about seventy-five per cent.

I am,

Ladies and Gentlemen,

Your obedient Servant,

F. H. BEAVIS,

Chief Sanitary Inspector.

SANITARY STATISTICS.
TABLE OF NUISANCES RECORDED AND ABATED, 1935.

Nature of Complaints registered.	Defects brought forward from 1934	Complaints received and visited during 1935	Total	No. of complaints abated during 1935	No. of cases not abated at end of year.
Defective drains	26	168	194
" traps	3	101	104
" spouts and eaves troughing	15	85	100
" roofs	21	153	174
" and dirty W.C. pans	10	221	231
" floors	29	185	214
" and insufficient yard paving	15	69	84
" walls	43	160	160
" flushing cisterns	5	56	61
" ceilings	20	68	88
" forecourts	6	11	17
" sinks	8	28	36
Offensive animals	5	5
Offensive accumulations	57	57
Choked drains	148	148
Damp walls	19	70	89
Dirty rooms	107	599	706
Overcrowding	4	18	22
Absence of covered receptacle at butchers' premises	1	1	2
Miscellaneous	110	885	965
TOTALS	442	3058	3500
				2988	2988
				512	512

VISITS AND INSPECTIONS, 1935.

Infectious Disease	....	....	....	519
Work in course of construction	....	....	....	2209
Slaughterhouses	....	....	....	4235
Bakehouses	....	....	....	123
Dairies, Cowsheds and Milkshops	....	....	....	454
Markets	....	....	....	455
Outworkers	....	....	....	14
Common Lodging Houses	....	....	....	30
Fried Fish Shops	....	....	....	816
Re-visits	....	....	....	2642
Miscellaneous	....	....	....	2396
Workshops	....	....	....	533
Ice Cream Shops	....	....	....	26
Butchers' Shops	....	....	....	266
Contacts with Smallpox	....	....	....	—
Pig-killing on private premises	....	....	....	66
House-to-House Inspections	....	....	....	735
Overcrowding Survey	....	....	....	36
TOTAL	....	....	....	15626

DEFECTS IN OUTWORKERS' PREMISES.

Dirty Floors	....	....	....	....	—
Dirty Ceilings	....	....	....	....	1
Dirty Walls	....	....	....	....	4
Defective Roofs	....	....	....	....	—
,, Water-closets	....	....	....	....	—
,, Floors	....	....	....	....	—
,, Yard Paving	....	....	....	....	—
,, Firegrates	....	....	....	....	—
,, Walls	....	....	....	....	—
,, Drains	....	....	....	....	—
Other Defects	....	....	....	....	—
TOTAL	....	....	....	....	5

INSPECTION OF FACTORIES, WORKSHOPS AND
WORKPLACES.

Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries)	198	3	Nil.
Workshops (including Workshop Laundries)	291	10	Nil.
Workplaces (other than Outworkers Premises)	44	—	Nil.
TOTAL.....	533	13	Nil.

DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.—Contd.

Particulars. (1)	Number of Defects.		Number of Offences in respect to which Prosecutions were Instituted. (5)
	Found. (2)	Remedied. (3)	
<i>Nuisances under the Public Health Acts :—*</i>			
Want of cleanliness	110	108	....
Want of ventilation	....	....	....
Overcrowding	....	....	....
Want of drainage of floors	....	....	....
Other nuisances	....	....	....
Sanitary accommodation	10	9	....
	1	1	....
	1	1	....
	6	6	....
	3	2	....
<i>Offences under the Factory and Workshop Acts :—</i>			
Illegal occupation of underground bakehouse (s. 101)	....	....	....
Other offences (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)	....	....	....
Total	131	127	....

* Including those specified in Sections 2, 3, 7, & 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

DISINFECTANTS.

Quantity given : Fluid	....	246 gals. 3 qts. 1 pt.
Powder	....	1 cwt. 3 qrs. 2 lbs.

DISINFECTION.

Cases of Cancer	....	....	....	34
„ Consumption	....	....	....	43
„ Infectious Disease	....	....	....	399
„ Smallpox	....	....	....	—
Verminous Rooms	....	....	....	454
School Rooms Disinfected	....	....	....	—
School Shawls „	....	....	....	7
Library Books „	....	....	....	114
Lots of Bedding „	....	....	....	584
Lots of Bedding Destroyed	....	....	....	40
Animals Destroyed	....	....	....	—
Miscellaneous Articles Destroyed	....	....	....	48
Miscellaneous Articles Disinfected	....	....	....	—

DAIRIES, COWSHEDS AND MILKSHOPS.

Dairies and Milkshops	....	....	....	70
Cowsheds	....	....	....	21
Milk Purveyors from outside the Borough	....	....	....	44
TOTAL	....	....	....	135

One farm, one bottling establishment, one dairy and two retailers from outside the Borough are licensed for the production or distribution of Grade A (Tuberculin Tested) Milk. Eleven farms, two bottling establishments and three milk shops are licensed for the production or distribution of Grade A Milk. There are five retailers who are licensed to sell Pasteurised Milk, and two licences have been issued for the pasteurisation of milk within the Borough. There is one retailer from outside the Borough, who possesses a supplementary licence to sell Grade A (Tuberculin Tested) Milk within the Borough, who also sells Grade A and Pasteurised Milk.

Inspections	454
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DAIRIES, COWSHEDS AND MILKSHOPS—Contd.

NUISANCES FOUND—

Dairies requiring limewashing	55
Cowsheds requiring limewashing	....	....	....	48
Dirty yards	....	....	....	—
Defective paving	....	....	....	4
Offensive accumulations	....	....	....	4
Defective ceiling plaster	....	....	....	—
Unsuitable and dirty utensils	....	....	....	—
Milk and containers uncovered	....	....	....	4
Defective floors	....	....	....	9
Defective vent shafts	....	....	....	—
Dirty conditions	....	....	....	19
Insufficient water supply	....	....	....	—
Choked drains	....	....	....	—
Defective water-closets	....	....	....	1
Defective drains	....	....	....	—
Miscellaneous	....	....	....	6
TOTAL	....	....	....	150

SLAUGHTERHOUSES.

Registered	....	....	....	....	8
Licensed	....	....	....	....	12
TOTAL	....	....	....	....	20
Number of Inspections	....	....	....	....	4235

NUISANCES FOUND—

Requiring limewashing	....	....	....	22
Want of cleanliness	....	....	....	4
Insanitary condition of pens and yards	....	....	....	—
Offensive accumulations	....	....	....	4
Choked drains	....	....	....	5
Other defects	....	....	....	21
TOTAL	....	....	....	56

COMMON LODGING HOUSES.

On Register	....	....	....	....	1
Number of persons for whom accommodation is provided :—	Adults, 111 ; Children 8.				
Inspections	....	....	....	....	30

RATS AND MICE (DESTRUCTION) ACT, 1919.

The following is a table showing the work carried out by your officer under the above Act during the year under review :—

Rats Caught	Complaints Received	Due to Defects of Drains or Sewers.	Due to Structural Defects.
6,101	314	21	11

BAKEHOUSES.

Factory Bakehouses	....	....	....	20
Workshop Bakehouses	....	....	....	9
Domestic Bakehouses	....	....	....	1
TOTAL	....	....	....	30
Number of Inspections	....	....	....	123

NUISANCES FOUND—

Limewashing overdue	....	....	....	45
Dirty yards	....	....	....	—
Ceilings requiring re-painting	....	....	....	—
Choked drains	....	....	....	—
Dirty W.C. pans	....	....	....	—
No separate accommodation for sexes	....	....	....	—
Accumulations of manure	....	....	....	—
Defective yard paving	....	....	....	—
Defective vent shafts	....	....	....	—
Want of cleanliness	....	....	....	3
Other defects	....	....	....	2
TOTAL	....	....	....	50

FOOD SUPPLY.

There are on the registers of the Department—

Butchers' Shops	....	....	....	....	92
Butchers' Stalls (in covered market)	....	....	....	....	2
Wholesale Meat Store	....	....	....	....	2
Fried Fish Shops	....	....	....	....	41
Ice Cream Shops	....	....	....	....	160
Cooked Meat Shops	....	....	....	....	55

and these premises are regularly inspected by your officers.

MEAT AND FOOD DESTROYED.

		Tons	Cwts.	Qrs.	lbs.
Carcases of Beef and Offal	....	8	16	1	17
Portions of Beef and Offal	....	1	14	3	7½
Carcases of Veal and Offal	....		2	3	18
Carcases of Pig and Offal	....	1	3	1	8
Portions of Pig and Offal	....		6	0	4
Carcases of Mutton and Offal	....		1	3	21
Portions of Mutton and Offal	....			3	5½
Heads	....	2	5	1	24
Lungs	....		16	1	1½
Livers	....		13	1	14½
Plucks	....		16	3	17
Offal	....		15	1	20
Hearts	....				15½
Kidneys	....				8½
Legs	....			3	8½
Chilled Beef	....			3	0 16
Beef Trimmings	....				2 14
Loose Fat and Suet	....				2 25
1 Tin of Frozen Egg	....				1 14
7 Stone of Hake	....				3 14
72 Rabbits	....				—
1 Fowl	....				—
15 Boxes of Kippers	....				—
16 Barrels of Jersey Potatoes	....				—
126 Tins of Apricots	....				—
21 „ „ Pineapples	....				—
16 „ „ Cherries	....				—
10 „ „ Peas	....				—
6 „ „ Oranges	....				—
4 „ „ Pears	....				—
4 „ „ Fruit Salad	....				—
3 „ „ Pine Slices	....				—
2 „ „ Grape Fruit	....				—
1 Tin „ „ Pine Cubes	....				—
1 „ „ Grapes	....				—
1 „ „ Loganberries	....				—
1 „ „ Chicken, Ham and Tongue	....				—
TOTAL	....	18	0	2	3½

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

The following table shews the number of carcases inspected during the year, together with the approximate average per week.

	Beasts	Calves	Pigs	Sheep	Total.
Total inspected....	1074	2473	5702	5840	15,089
Approximate average per week.	21	47	110	112	290

CLASSIFICATION OF DISEASES FOUND IN THE
UN SOUND FOOD.

				Tons	Cwts.	Qrs.	lbs
Abscesses	....	....	....	6	3	8	
Actinomycosis	....	....	....		1	8	
Angioma	....	....	....	1	1	5	
Blood Aspiration	....	....	....		1	24	
Bone Taint	....	....	....	1	1	1	
Bruising	....	....	....	1	17	2	27
Cirrhosis	....	....	....		2	21	
Coccidiosis (Rabbits)	....	....	....			—
Contamination	....	....	....			5½	
Cystercercus Tenuicollis	....	....	....		1	4½	
Decomposition	....	....	....	1	1	27½	
Degeneration	....	....	....	1	1	25	
Distomum Hepaticum	....	....	....	2	2	25½	
Echinococcus Veterinorum	....	....	....			4	
Emaciation	....	....	....	5	3	0	
Endocarditis	....	....	....			11	
Fatty Degeneration	....	....	....		1	21	
Fatty Infiltration	....	....	....	2	1	7	
Ill-bled	....	....	....		3	4	
Inflammation	....	....	....	5	0	12	
Jaundice	....	....	....	2	3	2	
Johnes Disease	....	....	....	15	1	2	
Leukaemia	....	....	....			8	
Mammitis	....	....	....	6	3	0	
Moribund	....	....	....	1	3	2	
Necrosis	....	....	....	3	1	12	
Nephritis	....	....	....		2	25	
Oesophagostoma Columbianum						—	
	(Beast's runners)	....				
Oedema	....	....	....	10	1	1	
Pericarditis	....	....	....		2	0	
Pleurisy	....	....	....	1	0	11	
Pneumonia	....	....	....	15	3	4	
Pyaemia	....	....	....		1	23	
Sarcoma	....	....	....		1	8	
Sooty Mange	....	....	....			3	
Strongylus Filaria	....	....	....			10	
Swine Erysipelas	....	....	....	1	3	24	
Tuberculosis	....	....	....	10	17	0	0½
Unsoundness	....	....	....		6	1	7
Uraemia	....	....	....		5	3	0
Urticaria	....	....	....		2	0	12
TOTAL		....		18	0	2	3½

TABLE SHOWING THE RESULTS OF THE BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES.

No. of Sample	Organisms per 1 c.c.	T.B.	Coli per $\frac{1}{100}$ c.c.	Other organisms present.	Sediment per half-pint.
1.	14,300	—	—	—	—
2.	12,700	—	—	—	—
3.	3,300	—	—	—	—
4.	81,000	—	+	—	—
5.	210,000	—	+	—	—
6.	804,000	—	+	—	—
7.	21,400	—	—	—	—
8.	81,000	—	—	—	—
9.	9,300	—	—	—	—
10.	36,000	—	—	—	—
11.	82,000	—	—	—	—
12.	354,000	—	—	Mastitis	—
13.	13,800	—	—	—	—
14.	3,200	—	—	—	—
15.	9,100	—	—	—	—
16.	392,000	—	—	—	—
17.	324,000	—	+	—	—
18.	23,100	—	+	—	—
19.	21,800	—	—	—	—
20.	25,100	—	—	—	—
21.	2,100	—	—	—	—
22.	38,000	—	+	—	—
23.	1,300	—	—	—	—
24.	7,000	—	—	—	—

HOUSING.

Number of new houses erected during the year :—

(a) Total (including numbers given separately under (b))	243
(b) With State assistance under the Housing Acts :—	
(i) By the Local Authority	3
(ii) By other bodies or persons	—

I. INSPECTION OF DWELLING-HOUSES DURING THE YEAR :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ....	....	....	....	....	1339
(b) Number of inspections made for the purpose ....	....	2761			
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ....	....	....	....	....	657
(b) Number of inspections made for the purpose ....	....	1235			
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ....	....	....	....	....	Nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ....	....	....	....	....	811

II. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	726
----------------------------------------------------------------------------------------------------------------------------------	------	------	-----

III. ACTION UNDER STATUTORY POWERS DURING THE YEAR :—

A. Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 : ....	....	....	....	....
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ....	....	14		
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—				
(a) By owners ....	....	....	....	14
(b) By Local Authority in default of owners ....	....	2		

B. Proceedings under Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	....	....	....	....	....	5
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—						
(a) By owners	....	....	....	....	....	4
(b) By Local Authority in default of owners	....					Nil

C. Proceedings under Sections 19 and 21 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made	....	....	....	....	....	3
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	....	....	....	....	....	3

D. Proceedings under Section 20 of the Housing Act, 1930 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	....	....	....	....	....	Nil
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	....	....	....	....	....	Nil

DISINFECTION OF VEHICLES AT THE CATTLE MARKET.

Month.	No. of Vehicles Disinfected.	Fees Received. £ s. d.	Expenditure. £ s. d.
January	211	5 5 6	3 4 0
February	213	5 6 6	2 8 0
March	197	4 18 6	2 16 0
April	222	5 11 0	3 6 0
May	168	4 4 0	2 11 0
June	146	3 13 0	2 3 0
July	102	2 11 0	2 10 0
August	126	3 3 0	1 16 0
September	259	6 9 6	3 8 0
October	221	5 10 6	3 2 0
November	226	5 13 0	2 19 0
December	197	4 18 6	3 12 0
TOTALS	2288	57 4 0	33 15 0

BOROUGH OF SWINDON.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

School Medical Officer

(DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.)

For the Year 1935.

BOROUGH OF SWINDON
EDUCATION COMMITTEE.

* CHAIRMAN Alderman R. G. CRIPPS.

* VICE-CHAIRMAN Councillor J. BELCHER.

MEMBERS.

* THE MAYOR (Alderman Mrs. M. GEORGE, J.P.)

* Alderman J. L. CALDERWOOD
Alderman T. MANNING

* Mrs. Councillor S. ANDREWS

* Councillor C. S. MACPHERSON

* Councillor W. SEATON

Mr. R. GEORGE

* Mrs. P. M. DARLING

Mr. F. W. HAWKSWORTH

* Miss M. E. SLADE

* Alderman A. E. HARDING
Alderman L. J. NEWMAN

Councillor F. T. HOBBS

* Councillor W. R. ROBINS

* Councillor Mrs. L. E. WHITE

† Mrs. A. J. COLBORNE

Mr. J. HASKINS

* Mr. P. KING

Mr. H. WHITING

Director of Education—Mr. STANLEY HIRST, B.Sc.

* *Members of the Medical Inspection Sub-Committee.*

† *Chairman of the Medical Inspection Sub-Committee.*

STAFF.

School Medical Officer—DUNSTAN BREWER, M.R.C.S., L.R.C.P., D.P.H.

Assistant School Medical Officers—

V. R. WALKER, B.Sc., M.B., Ch.B., D.P.H.

VIOLET REDMAN KING, M.B., Ch.B.

Specialist Ophthalmic Surgeon.

OLIVER BEAKLEY PRATT, M.A., M.B., B.Ch., (Oxon.) D.O., M.R.C.S., L.R.C.P.

Specialist Nose, Throat and Ear Diseases.

F. COURtenay MASON, B.A., Lond. M.S., M.B., B.S., F.R.C.S.(Eng.)

Orthopaedic Surgeon.

M. F. FORRESTER BROWN, M.D. (Lond.) M.S.

Dental Surgeons—W. KENYON BERRIE, L.D.S., R.F.P.S.G.

KENNETH W. MASSEY, L.D.S. (Liverpool).

Head Clerk—S. MANSFIELD DEE.

Senior Clerk School Medical Service—J. W. DAY.

Clinical Clerks—Miss G. L. NORRIS; Miss E. M. KEY.

SCHOOL NURSES AND HEALTH VISITORS.

Miss M. EVANS.

*3 years Certificate of Hospital Training.**Queen's Nurse.**Certificate of Central Midwives Board.**Health Visitor's Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

Mrs. K. M. D. FRANCIS.

*3 years Certificate of Hospital Training.**Certificate of Central Midwives Board.**Health Visitor's Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

Miss A. HAWKINS.

*4 years Certificate of Hospital Training.**Certificate of Central Midwives Board.**Health Visitor's Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

Miss O. MARKER.

*4 years Certificate of Hospital Training.**Certificate of Central Midwives Board.**Health Visitor's Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

Miss E. M. PILCHER.

*3 years Certificate of Hospital Training.**School Nurse's and Health Visitor's and Tuberculosis Certificate.**Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

Miss I. D. SAMPSON.

*3 years Certificate of Hospital Training.**Certificate for Tuberculosis (Royal Chest Hospital, London).**Queen's Nurse.**Certificate of Central Midwives Board.**State Registered Nurse.***SCHOOL NURSE.**

Miss A. M. HOARE.

*2 years Certificate of Hospital Training.**Certificate of Central Midwives Board.**Certificate of the Royal Sanitary Institute.**State Registered Nurse.*

BOROUGH OF SWINDON.**EDUCATION COMMITTEE.**

Area ....	....	....	....	....	....	6,021 acres
Number of Elementary Schools	....	....	....	....	....	16
Number of School Departments	....	....	....	....	....	34
Recognised Accommodation	....	....	....	....	....	12,107
Number of Children on Register	....	....	....	....	....	8,974
Average Attendance	....	....	....	....	....	7,940
<hr/>						
Number of Secondary Schools	....	....	....	....	....	3
Number of Scholars on Roll :—						
The College, Secondary School	....	....	....	....	....	286
Euclid Street Secondary School	....	....	....	....	....	271
The Commonweal Secondary School	....	....	....	....	....	297

*To the Chairman and Members of the Education Committee
of the Borough of Swindon.*

LADIES AND GENTLEMEN,

I have pleasure in presenting the report upon the Medical Inspection and Treatment of School Children in the Borough for the year 1935.

The staff of the School Medical Service is now identical with that of the Public Health Service, with the exception that Miss A. M. Hoare is engaged as a school nurse in connection with school dental service only. The salaries of the various officers are adjusted for payment between the two departments concerned.

CO-ORDINATION.

The co-ordination of the work of the School Medical Service with that of the other health services in the Borough is now complete.

HYGIENE IN SCHOOLS.

The relationship of school buildings and equipment to the public health is a matter of great consequence. Not only is a considerable part of the active life of our children passed within the school curtilage, but it is there that many of their habits are formed, and as children learn more from example than by precept their future method of living is influenced at least as much by their school environment as by what they are taught therein. It is admitted on all hands that very few of our schools are what they should be and it is not only the desire but the determination of everybody concerned that they shall be improved as rapidly as circumstances permit. Since there is not now any real difference in view between the medical and educational authorities in regard to school buildings and equipment, nothing is gained by calling attention to the various deficiencies which are admitted to exist, for it is useless to worry the Education Committee to get along with improvements which they know to be necessary and which they are doing their best to supply. It is true that many of the children to-day are suffering from not having facilities which their successors will have, but this is equally true of all social facilities and so long as we make sure that we are progressing in the right direction we cannot complain if progress takes time and that we have to suffer inconvenience in the meantime. I shall, therefore, say nothing about the school buildings this year. I am, from the school medical point of view, quite satisfied with the programme which the Education Committee has before them. I trust they will be allowed to get on with it.

NURSERY SCHOOLS.

The rapid fall in the child population, particularly since 1920, largely eases, but to some extent complicates, the future of school planning. In Swindon there is no call either for school crêches or for nursery schools, but there is a call for nursery departments in infant schools better equipped than most of those available. At present 27% of children between the ages of three and five attend our elementary schools. This proportion should increase slightly—probably to 30%, but not more. In the new school at Pinehurst, the catering for this age-group is good, but in the older schools it is unsatisfactory. From the movements of the birth rate in Swindon during recent years the probability is that the number of new children to enter schools will, for some years, be in the neighbourhood of 700 per annum. Of three and four-year-olds, there are about 1,400 in the Borough, between 400 and 500 of which require accommodation in baby classes. The problem of catering for them is not great as regards numbers, but as they are widely spread about and cannot travel great distances, so baby classes should be numerous and small.

FINDINGS OF MEDICAL INSPECTION.

The age-groups inspected are those prescribed by the Board of Education, and inspections are carried out in accordance with the Schedule of the Board, with certain modifications and additions. In 1935 a test for colour blindness was introduced into the final inspection of the elementary school children. During 1935 there was much contention over the schedule and over routine inspections generally, the feeling amongst experts in school medicine being that the schedule, which was of the highest importance in the early days of school medical inspection, no longer covers the field and necessitates time and skill being wasted in looking for defects of structure which are either known to be there, known not to be there, or whose existence is of no particular consequence. The criticisms of the schedule and of the scheme of routine inspection are not destructive but constructive, and will lead to a better appreciation of real values. A complete evaluation of functions, such as is required for the furtherance of modern preventive medicine, is a long, complicated and difficult business, but it need not be done all at once, and most functions when once evaluated need no further attention, for, with few exceptions, variations are permanent throughout the life of the individual.

ARRANGEMENTS FOR TREATMENT.

The main difficulty in small communities is to arrange for the efficient management of children suffering from defects or diseases which require prolonged treatment. Such conditions are chorea,

endocarditis, chronic ear disease, some orthopaedic cases, asthma and so on. Fortunately, these conditions do not exist in large numbers, but the individuals suffering from them are often capable of being developed into efficient citizens if they are judiciously treated during childhood, whereas with scamped, intermittent, or inefficient management their life values are small. Some of these cases are very difficult to accommodate. It is impossible to supply special schools for most of them; they are rarely numerically sufficient to form special classes and it is not possible in present circumstances to get, in the common class, the individual consideration which these embarrassed children need. When classes are smaller and premises more satisfactory, some of the difficulties with these children will disappear, but they will always offer problems not easily solved. Many of these cases require a routine of living different from that of the common herd. In other words, their treatment is lifelong and is not satisfied by any measure which is temporary. This applies particularly to asthmatic and cardiac cases and to partially sighted and deafened children.

Towards the end of 1935, following a visit by Dr. Weaver of the Board of Education, the dental scheme for dealing with school children was recast and a third dentist to serve both the health and education committees was granted by the Town Council. The new scheme cannot get into stride until the Spring of 1936, so no evidence of its existence is shown by the statistics of last year.

The Clinic for school and child welfare work connected with the new school at Pinehurst was opened in the latter part of 1935. This eases the congestion at Eastcott Hill, which of late years had increased to intolerance and has allowed a freer development of the medical side of child rearing.

We have not been able to shift the temporary dental clinic at Faringdon Road to more permanent premises, but hope to do so before long. If the new municipal offices do emerge from paper as bricks and mortar within a reasonable time, it will be possible to transfer to them the circumlocution departments of the health office (where they will be more at home) and use the premises at Eastcott Hill only to do the business. In this event, the main dental clinic might be housed at the present health office.

We have not got an open-air school in Swindon, though one has been on the programme for a great many years. On the whole I am not sorry that it has not materialised, for after seeing Pinehurst and knowing the details of the programme of the Education Committee, I feel that the needs of most of our delicate children could be satisfied in new schools open to all and that the few for whom special provision is necessary could best be catered for in a

small convalescent home-school outside the Town. Such a convalescent home is no new suggestion, for it was part of the scheme for reforming the general hospital accommodation of the Borough, which, however, has temporarily—or permanently—fallen into abeyance.

We are hoping to see some much needed improvements in the physical education of children and the supply of spaces and appliances for their play. The new programme of the Board of Education promises, well, but what will come of it remains to be seen.

Something needs to be said of the findings of school inspections in 1935. The increase in the numbers of children returned as malnourished is due to a slight alteration of standard. The special Table (page 26) shows that malnutrition, judged on the old conventional standard, is practically non-existent, but also suggests that the general level of nutrition is capable of improvement.

The drop in ear and throat diseases is probably genuine. There has for some years been a steady decline in mouth breathing, running noses, adenoids, enlarged cervical glands and diseased tonsils. More remarkable still is the almost complete cessation of goitre, which fifteen years ago was the most prominent defect of Swindon children. The special clinic for dealing with cases of enlarged thyroid has been wound up and reconstructed to deal with errors of nutrition, endocrine disturbances and psychological problems.

We had a small local and topical spot of bother with ringworm in 1935. This disease used to be very troublesome in Swindon, but of recent years has been quite rare.

There was a comforting improvement in unclean and verminous conditions in 1935, but there are still some 600 school children who are not kept as clean as they should be. Some of the cases are due to causes beyond human help, but most are not.

Preventive medicine rests on three functions—physical environment, parasitism and physiological deviation. The first is the province of the sanitarians, the second of the epidemiologists, the last of the physicians, especially of those engaged in rearing children.

Our species, *homo sapiens*, the most recent product of evolution, not having reached fixation, is subject to much variation. The extent of this variation is finite and known, but it is so immense that the chance of any two of us being similar in all respects is

negligible. There is no such thing as a *normal* person, or a *normal* attribute, for all deviations about the mode of the incidence curve can be equal in vital value, and great departures from the mode in one character may be compensated by departures in others. It is usual, however, to consider great deviations from the mode as abnormal, even if they occur within the regular curve of variation, because what differs greatly from the fashion cannot be located in a suitable environment. If a species has reached the end of its evolution, the varieties of its functions plotted in graphic form will be about a regular, or binomial curve, but in man, not being a fixed species, variations lie in a skew curve with its mode bent to the side in which he is evolving. This can be illustrated as follows : If the height of adult males in a community varies between 4 feet and 7 feet, the regular curve has its mode at 5 feet 6 inches, but if the observed curve has its mode at 5 feet 7 inches, that is, skewed to the right, we may presume that the community is evolving in the direction of tallness. But a man of 4 feet is no more, nor no less, normal than a man of 7 feet, nor is either more or less normal than one of 5 feet 6 inches. Yet are these outsides at a disadvantage in competition with those of more usual height and suffer in consequence economically and in different ways are liable to pathological processes, which those about the mode escape. Thus, if a file of soldiers marches along a six foot trench, all the seven-footers will be sniped and all the four-footers escape. Whereas if the trench is full of carbon dioxide, and there are no snipers about, the seven-footers will survive, whereas, the four-footers will be asphyxiated. So in every function, or structure liable to deviations, those departing from the mode have special vulnerability requiring a modified environment for health ; but given that environment, they can maintain their integrity.

The transparent parts of the human eyeball are all liable to deviations, both in their refractive indices and in their curvatures. If all the indices are high and all the curvatures high, the eye must be myopic ; if the deviations are the reverse, the eye must be hypermetropic ; only if the deviations are in various directions, the sum of which is balance, will the eye be emmetropic. But none of these conditions is disease. In the usual civilised environment, the emmetrope has the best of it, but the man in the wilds gains by hypermetropia, the student by myopia. The savage who is myopic will probably die of starvation, the student who is hypermetropic will suffer persistent headache unless the environment is specially varied to accommodate him. For these variations of refraction we alter the environment by supplying spectacles + lenses for the hypermetrope who must do near work, — lenses for the myope for distant vision. Unfortunately our accommodation is not perfect because we cannot place the lenses in contact with the eyeball and the interval between the eyeball and the glasses causes the latter to distort the image.

The acidity of the gastric juice varies. At the extreme left of the curve of deviations the hydrochloric acid is nearly absent, at the extreme right, it is excessive. With the dietary acceptable for those about the mode the former will be prone to gastric cancer, the latter to ulceration. Those whose gastric juice is of low acidity will escape gastric ulcer in all circumstances ; those whose juice is highly acid will succumb to ulcer unless they vary their feeding habits from the fashion. So the essence of the prevention of gastric ulcer is to discover those with deviations of hydrochloric acid to the right and to teach them to vary their feeding habits accordingly.

The estimation and accommodation of deviation is the most important element in school medicine ; the detection and treatment of disease is subsidiary. The latter indeed is necessary because we are not clever enough to prevent disease, or, where we can do so, fail from sloth, or from obstructive stupidity. Until recently, the doctor did go into the school with the sole object of discovering ailing children and arranging for their remedy ; and still many persons (including some school doctors) look upon this as his chief, if not his sole, work. Few have yet realised that the maintenance of health in the healthy is his main objective.

Of the environments which influence health, school medicine deals with cleanliness, with nutrition, with exercise and, of course, with education itself which, after nutrition, is the most important of all environmental factors.

The problems of nutrition have much exercised our minds during the past few years and their study is leading us to accept that though the feeding of our children is generally sufficient to enable them to live, it is not sufficient to give them the best life of which they are capable. The rapid fall in the birth rate of the past three decades has halved the numbers of our children and must before long halve our available man-power. So we cannot afford to allow our children not to be nourished to their full capacity. The supply of milk at a reduced rate for those who can afford it, and free to those who cannot, has to some extent lessened the nutrition problem and possibly offers a way of abolishing it altogether. We shall probably come to free milk for all children, for three separate schools of politicians are working towards it with different objects in view ; but at present we are (in theory) limited to supplying free milk to children who are undernourished and whose parents are unable to pay for the provision. The expense of quibbling over the restrictions being much greater than that of the milk itself, the tendency to give lip service to the principle and the milk to expediency, grows apace. The same applies to free meals, though as these are more costly and their provision exceptional rather than general, more attention is paid to the

regulations which govern them. I must refrain from saying more on this subject for I have no business with politics ; but from the economic standpoint it would seem that with an income tax of four and six in the pound, the Treasury might wink at small surreptitious expenditures on the wherewithal to rear stalwart taxpayers.

The fall in physical disease in our children is largely discounted by the rise in mental sickness ; but whether this latter is real, or only apparent because of the greater attention now paid to psychological problems, it is difficult to decide. The deterioration in the size of families has added greatly to the difficulty of children adjusting themselves to life and the premium set on sickness has done more, in teaching them to discharge their emotional stresses by going sick in place of subliming them through volition. It is not the naughty but the sick children who produce the most frequent and complicated psychological problems. We are still far from a satisfactory method of dealing with (alleged) delinquent children who attend State-aided schools. It seems not to have dawned upon any but educationists and psychologists that increase in education must produce increase in apparent naughtiness and add to the difficulty of adjusting it. We cannot free the mind to think and refuse it the right to rebel against convention ; nor can we educate children to rely on themselves without creating temporary difficulties, because power develops before control. My objection to the Children's Court must be well known from the attention given to what I said in London in January. From what I said, I retract and modify nothing, the principle governing the Children's Court is wrong and no quibbling, nor modification, will make it right.

The problems of mental defection—of deviations of intelligence towards the left—are quite different from those of naughtiness. The lower grades of mentally defectives are pathological (secondary amentia) or deviations from the mode too wide to allow of any accommodation ; but the defectives of higher grades—what the Americans call morons—should not be impossible to place in the community as happy and useful citizens. They can rarely hold their own in the highly specialised life of urban industry, but in agriculture they are less at a disadvantage. To educate them along the lines (however modified) suitable for children of average intellectual powers seems to me to be a mistake, for the results, even if successful, are not much different from performing animals, which though amusing, are not useful. The observed curve of deviations of intelligence appears to lean to the left, suggesting that human intelligence is declining. I believe, however, that this is an error due to assuming a conventional mode which is too high and that the true mode is not 100 but 95 on our intellectual scale.

None of us belongs to stock which has been biologically selected. We all carry recessive genes and so are liable to produce rogues. But even at the best and in the most favourable circumstances our children fall far short of what they might be. It is therefore useless to expect to find perfect children and unwise to work to a standard which is not at present in our powers to attain. But considering our children *en masse*, it is clear that even without the help of eugenics, we can raise the level above what it is at present. We have not been sluggish, for our children today are taller, heavier, freer from disease, cleaner, better nourished, better educated and generally better nurtured than they have been in the past. In only one feature is there deterioration—the state of the teeth. Dental caries increases in frequency—or rather in extent, for it has been almost universal for years. The reasons for this are not clear, but it is clear that the explanations given for the prevalence of caries do not cover the whole truth, if any of it.

As we progress, our problems become more complex and less easy of solution. We steadily raise the standard of fitness which satisfies us and we do right to do so. Our children are our only asset of real value—the rest is dross—and this asset has a potential far above anything we have realised. In comparing the children of today with those of twenty-five years ago, we must bear in mind that we passed then much which we shall not pass today and, if we continue to progress, twenty-five years hence we shall not be satisfied with children which today we pass as physically and mentally fit. Year after year our statistics show some, but slight, reduction of the children found unfit, but did we apply today those standards of fitness which we used when school inspection started in 1908, we should find that unfitness has decreased enormously.

We anticipate that all new schools of size and importance will be provided with clinics. School medicine is today a necessary adjunct to education and in its development will become an integral part of it. For it is clear that ere long the potentials of our future citizens must govern their education and employment and the estimation of these potentials is one of the foundations of preventive medicine. With the rapid fall in our juvenile population we shall soon cease to be able to carry on unless each and everyone is trained to and placed in the employment for which he is naturally fitted. So far we have only played with efficiency testing, but in the future the school clinic must gradually develop into the anthropological laboratory where we shall seek not what is wrong with our children, but what is right with them, paying particular attention to attributes which are superior to the average. Every child with intelligence on the right side of the mode has special powers capable of training to be of exceptional value, but if these

special powers are not detected (and generally they are not) they remained untrained and useless and their possessors become mere units in a mass-trained herd. Outstanding abilities will always come to the top in any circumstances, but powers just above the average will not unless they are helped forward.

INFECTIOUS DISEASE.

Apart from physiological variations and problems connected with nutrition, the bulk of the work in medical supervision of children consists in the management of infection. The acute reactions to infection offer no problems which are special either to school children, or to schools, but two matters connected with infection are very special to children. These are :—incomplete immunity from minimal doses of infection, and the results of reaction which has not ended in complete immunity, or which has left behind chronic disabilities as a result of complications. As regards the latter, the elements of proper management should be clear and lie in the intimate relationship in the work of the isolation hospital with school medicine. Diphtheria, which is always treated in the isolation hospital, leaves no disabilities ; Scarlet Fever, which is generally treated in the isolation hospital—practically always when it is recognised—is apt to leave chronic ear disease, carditis and sundry other less common disabilities. We recognise the importance of not discharging from hospital cases of scarlet fever with complications which have not been cleared, but a few chronic ear cases cannot, with convenience or benefit, be kept in an isolation hospital until their ears have recovered completely. Some few indeed never recover completely, because they are left with perforations which will never heal, or with the results of destructive processes which result in permanent damage to hearing. Moreover, a few cases of scarlet fever develop rheumatism and carditis many weeks after the original infection. It is not beneficial to keep mild scarlet fever cases in hospital for long periods on the chance that they might develop rheumatism, but it is necessary to keep a watch on all children who have had scarlet fever to look for this complication, which is insidious and often gives no obvious sign of its occurrence.

Measles and Whooping Cough are not generally treated in isolation hospital though they give rise to perhaps more resulting disabilities than the other fevers. Asthma is frequently determined by whooping cough. Chronic bronchitis, or inefficient lung action from collapse, is often left after both measles and whooping cough, and chronic ear disease may result from either. Less common, but much more difficult, are the palsies which may result from any infection, but particularly from poliomyelitis, and the secondary amentias which may occur from any infection, though chiefly from cerebro-spinal meningitis and encephalitis lethargica.

Immunity to the parasites which are endemic in our civilisation is achieved by acute reaction, or by intermittent exposure to doses of infection insufficient to set up a tangible reaction. There is, however, a moderately large number of individuals who react in neither of these ways and are continually falling sick in an indefinite manner from repeated infection. These cases offer one of the most difficult and complex problems in medicine, and one which we have only begun to appreciate in recent years.

Looking into the future, one can see for certain the practical abolition of diphtheria by artificial immunisation. Probably the abolition of the dangers of measles also. Though, in theory, this is possible at present, there are many practical difficulties to be overcome before we can give the promise of the suppression of measles, which we can of diphtheria. The position as regards whooping cough is also not unpromising, though here prevention has not passed the experimental stage. For scarlet fever and the streptococcal diseases, our available methods of prevention are of doubtful utility, but recent work in connection with the streptococcus has made the outlook more hopeful.

PROVISION OF MEALS.

Under Sections 82-84 of the Education Act, 1921, free dinners have been provided for necessitous school children on week-days during term time and school holidays. The number of children fed during the year was 76, and the total number of meals supplied was 14,988. The meals are cooked and served at the Cookery Centres.

March 1936.

DUNSTAN BREWER,
School Medical Officer.

THE ORTHOPAEDIC SCHEME.

The orthopaedic scheme for the Borough has continued on the same basis as for 1934, the conduct of the Clinic being in the hands of a voluntary body, the Children's Orthopaedic Clinic, working under an arrangement with the Education and Child Welfare Committees. Forty-four new cases attended during the year in addition to those continuing observation and treatment from 1934.

The nature of the defects of the 44 new cases is summarised below :—

	Infant Welfare Section.	Elementary Education Section	Higher Education Section.
A.—CONGENITAL IN ORIGIN :—			
Congenital dislocation of hip	....	2	....
Coxa vara	....	....	1
Torticollis	....	1	1
Birth injury	....	....	1
Syndactylism	....	....	1
Talipes	....	1	1
			2
B.—BONE AND JOINT DISEASE :—			
Coxa plana	....	1	....
Deformity following tuberculosis of knee	....	....	1
Epiphysitis	....	....	1
		
C.—NERVOUS DISEASES :—			
Spastic paraplegia	....	1	....
Poliomyelitis	....	1	....
		
D.—DEVELOPMENTAL AND POSTURE :—			
Postural defects including scoliosis	....	10	5
Genu valgum	....	1	4
Genu varum (rachitic)	....	1	....
Deformities of feet and toes	1	1	3
		
E.—INJURIES :—			
Knee joint defects	....	1	1
TOTALS	....	5	27
			12

Summary of work of Clinic—

	Infant Welfare Section.	Elementary Education Section.	Higher Education Section.	TOTAL
Consultations with Surgeon	31	143	28	202
Attendances at Sister's weekly Clinic	.... 77	198	46	321
Appliances provided	.... 2	4	....	6

Cases requiring in-patient operative and remedial treatment were admitted to the Children's Orthopaedic Hospital, Bath, the following being a summary of such treatment provided under the scheme :—

	NATURE OF DEFECT AND TREATMENT.	HOSPITAL IN-PATIENT DAYS.
1	Multiple arthritis (Still's disease) for remedial treatment	.... .... 249
2	Multiple arthritis for remedial treatment	148
3	Clawed great toes—tendon transplantations	45
4	Spastic paraplegia—for reduction of contractures and re-education	.... 214
5	Congenital dislocation of hip—for osteotomy	139
6	Coxa plana	199*
7	Bilateral wry-neck—operation	.... 97
8	Wry-neck—operation	.... 68
9	Deformity of hand—plastic operation	.... 59
10	Arthritis of hip following congenital dislocation	.... .... 144
11	Poliomyelitis—mid tarsal arthrodesis	.... 62
12	Spastic paraplegia for re-education	.... 184
13	Hammer toes—remedial operation	.... 28
	TOTAL HOSPITAL IN-PATIENT DAYS	1636

* Remaining in Hospital on 31st December, 1935.

VICTOR R. WALKER,
Assistant School Medical Officer.

APPENDIX I.

*To the Chairman and Members of the Education Committee
of the Borough of Swindon.*

LADIES AND GENTLEMEN,

I have pleasure in presenting the Annual Report on Dental Inspection and treatment for the 1935.

6 Elementary Schools comprising 12 departments have been dentally inspected, and it was found that 74·74% of the children require treatment. 1,743 children were referred for treatment, and 2,580 attended the Clinic.

The Dental Clinic at Pinehurst is now completed, and will be opened this year. The whole dental scheme is under reorganisation, and when this is in working order, a step forward will have been made toward that ideal of Dental Service which should ever be our aim.

ELEMENTARY SCHOOLS.

5038 appointments were made.

4935, or 97% of the appointments were kept.

2,480 teeth were extracted, and 452 were filled.

7,508 other operations (including dressings, scalings, and root treatments) were carried out.

The X-ray was used in many obscure cases for the purpose of diagnosis.

The practice of seeing all children up to nine years of age, and following up those who accept treatment was continued.

The dental nurse was present at practically all sessions. Her services are greatly valued and appreciated.

Casuals (i.e., those having no appointments) are seen every morning between the hours of 11 and 12 o'clock.

INFANT WELFARE.

366 children were treated from the Infant Welfare Centre, and 29 Ante-natal cases were treated or given advice.

ROUTINE INSPECTION.

2,332 children were inspected at the schools.

508 or 21.7% were found to be free from caries.

81 or 3.51% were found to require no treatment.

1,743 or 74.7% were recommended for treatment.

2,580 children attended the Clinic.

1,723 were rendered dentally fit.

4,935 attendances were made.

SECONDARY SCHOOLS.

Treatment was carried out from the 467 pupils who were referred at the end of 1934.

300 pupils were treated, making 555 attendances at the Clinic.

154 teeth were extracted.

388 permanent teeth were filled.

188 other operations (including dressings, crowns, scalings and root treatments) were carried out.

The analysis will be found in the statistical tables for Higher Education.

We thank all who assisted us in any way in carrying on this important work.

W. KENYON BERRIE, L.D.S., R.F.P.S.G.

School Dental Surgeon.

February, 1936.

APPENDIX II.**REPORT OF THE OPHTHALMIC SURGEON.**

To the Chairman and Members of the Swindon Education Committee.

LADIES AND GENTLEMEN,

The Eye Clinics were carried on throughout the School year, either one or two sessions being held every week according to the number of children awaiting examination. In co-operation with Dr. Forrester Brown I arranged for a small number of children with early myopia to attend the Orthopaedic Clinic, in order to discover whether any correlation could be found between the early myopic state and any other physical and particularly postural defects. So far the number of cases observed and the length of time are insufficient to allow of any conclusions being reached, but I hope that if it is possible to extend these observations some information of practical value may be obtained.

I wish to thank all who assisted me in the work of the Clinic.

O. B. PRATT, M.A., M.B., M.R.C.S., L.R.C.P.
Ophthalmic Surgeon.

March, 1936.

APPENDIX III.**REPORT OF THE AURAL SPECIALIST.**

LADIES AND GENTLEMEN,

It will be noticed that there has been a considerable reduction in the amount of work done in the Special Aural Clinic during the year 1935. This is the result of a number of factors which I need not mention in detail.

We may be gratified, however, in seeing evidence that for the time being there has been an improvement in our area in the health of the school children as shown by diseases of the Ear, Nose and Throat.

The work of the clinic proceeded quite smoothly throughout the year. I wish to thank all those who assisted me for their courtesy and help.

F. COURTENAY MASON, B.A., M.B., M.S., F.R.C.S.

April 16th, 1936.

**SUMMARY OF CASES SEEN AT THE SPECIAL AURAL CLINICS,
1935.**

Number of Clinics held	....	....	....	....	4
Number of cases examined	....	....	....	....	34
Number of consultations at Clinic	....	....	....	....	42
Number of attendances at Clinic	....	....	....	....	42

Defects Discovered.

NOSE & THROAT—

Adenoids only	....	....	....	....	3
Enlarged tonsils and adenoids	....	....	....	....	5
Enlarged tonsils only	....	....	....	....	3
Enlarged glands	....	....	....	....	5
Nasal catarrh and nasal obstruction	....	....	....	....	8
Deflected septum	....	....	....	....	7
Rhinorrhoea and Rhinitis	....	....	....	....	9
Inflamed turbinates	....	....	....	....	3
Hypertrophy of turbinates	....	....	....	....	2
? Sinusitis	....	....	....	....	1

EAR—

Otitis media	....	....	....	....	1
Deafness	....	....	....	....	1
Otorrhoea	....	....	....	....	1
Thickened, scarred, perforated, indrawn, injected and opaque membrane	....	....	....	....	8

X-ray EXAMINATIONS. Nasal sinuses etc.

.... 7

Operations.

	Recom-mended.	Per-formed.	Awaiting operation.	Refused
Tonsils & adenoids	10	10	....	....
Adenoids only	1	1	....	....
Sub-mucous resection	5	4	1	....
Reduction of turbinates	2	2	....	....
Investigation of Antra under anaesthesia	2	1	1	....
Examination of Antra & Nasopharynx under anaesthesia	....	2	....	....
Drainage of Antra	2	2	....	....

ELEMENTARY EDUCATION.

Statistical Tables.

TABLE I.—Return of Medical Inspections.**A.—ROUTINE MEDICAL INSPECTIONS.**

Number of Code Group Inspections :

Entrants	....	....	....	....	813
Intermediates	....	....	....	....	893
Leavers	....	....	....	....	888
TOTAL	....	....	....	....	2594
<hr/>					
Number of other Routine Inspections	....	....	....	....	Nil

B.—OTHER INSPECTIONS.

Number of Special Inspections	....	....	2428
Number of Re-Inspections	....	....	6181
TOTAL	....	....	8609
<hr/>			

TABLE I. C.

**Number of INDIVIDUAL CHILDREN found at ROUTINE
Medical Inspection to Require Treatment (Excluding
Uncleanliness and Dental Diseases).**

GROUP. (1)	Number of Children.		Percentage of Children found to require treatment (4)
	Inspected (2)	Found to require treat- ment (3)	
CODE GROUPS :			
Entrants	813	113	13.7
Intermediates	893	175	19.4
Leavers	888	143	16.1
Total (Code Groups)	2594	431	16.6
Other Routine Inspections ....	....	....	....

TABLE II.—A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1935.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS.			SPECIAL INSPECTIONS.		
	No. of Defects.		Requiring treatment.	Requiring to be kept under observation but <i>not</i> requiring treatment.	No. of Defects.	
	(1)	(2)				
Malnutrition	14	39	127	2
<i>Skin—</i>						
Ringworm :						
Scalp	18	
Body	11	
Scabies	6	1	4	
Impetigo	1	....	35	
Other Diseases (Non-Tuberculous)		25	....	1	517	
<i>Eye—</i>						
Blepharitis	13	3	14	
Conjunctivitis	2	....	21	
Keratitis	
Corneal Opacities	1	....	2	
Defective Vision (exclud. Squint)		135	....	....	37	
Squint	12	4	4	1
Other Conditions	11	6	118	1
<i>Ear—</i>						
Defective Hearing	11	5	21	2
Otitis Media	10	6	127	4
Other Ear Diseases	21	6	158	18
<i>Nose and Throat—</i>						
Chronic Tonsillitis only	28	....	80	163	50
Adenoids only	4	....	14	11	6
Chronic Tonsillitis and Adenoids	18	....	11	38	4
Other Conditions	42	....	31	132	11
Enlarged Cervical Glands (Non-Tuberculous)	3	....	7	55	11
Enlarged Thyroid Gland	11	....	8	15	21
Defective Speech	4	....	6	1	1

TABLE II. A.—(Continued)

DEFECT OR DISEASE.	ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
	No. of Defects.	Requiring treatment.	No. of Defects.	Requiring treatment.
(1)	(2)	(3)	(4)	(5)
<i>Heart and Circulation—</i>				
Heart Disease :				
Organic ....	....	....	....	1
Functional ....	....	1	31	2
Anaemia ....	....	....	4	3
<i>Lungs—</i>				
Bronchitis ....	....	....	2	11
Other Non-Tuberculous Diseases	6	12	20	....
<i>Tuberculosis—</i>				
Pulmonary :				
Definite ....	....	....	....	....
Suspected ....	....	....	1	....
Non-Pulmonary :				
Glands ....	....	....	....	1
Bones and Joints ....	....	....	2	1
Skin ....	....	....	....	....
Other Forms ....	....	....	....	....
<i>Nervous System—</i>				
Epilepsy ....	....	....	1	....
Chorea ....	....	....	1	1
Other Conditions	....	5	10	29
<i>Deformities—</i>				
Rickets ....	....	5	18	....
Spinal Curvature ....	....	3	17	4
Other Forms ....	....	13	31	43
Other Defects and Diseases	....	54	52	407
				23
TOTALS		449	410	2150
				187

TABLE II. B.

**Classification of the Nutrition of Children Inspected during the Year in
the Routine Age Groups.**

Age Groups	Number of Children Exam- ined.	A (Ex- cellent)		B (Normal)		C (Slightly Sub Normal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants	813	108	13	627	77	78	10	—	—
Second Age-Group	893	132	15	647	72	113	13	1	—
Third Age-Group	888	152	17	670	76	65	7	1	—
Other Routine Inspection	—	—	—	—	—	—	—	—	—
TOTAL	2594	392	15	1944	75	256	10	2	—

TABLE III.**Return of all Exceptional Children in the Area.****CHILDREN SUFFERING FROM MULTIPLE DEFECTS.**

Children suffering from any combination of the following types of defect:—

- Blindness (Not Partial Blindness).
- Deafness (Not Partial Deafness).
- Mental Defect.
- Epilepsy.
- Active Tuberculosis.
- Crippling.
- Heart Disease.

Number of children suffering from any combination of the above defects	5
------------------------------------------------------------------------	------	------	------	------	---

BLIND CHILDREN.

A blind child is a child who is too blind to be able to read the ordinary school books used by children, and can only be appropriately taught in a school for blind children.

At Certified Schools for the Blind.	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
4	4

PARTIALLY SIGHTED CHILDREN.

Children who, though they cannot read ordinary school books or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school for the partially blind

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elementary Schools	At other Institutions.	At no School or Institution	Total
....	1	1	3*	5

* Three infants. Final result may be better than "Partially Sighted."

DEAF CHILDREN

Children who are too deaf to be taught in a class of hearing children in an elementary school, and can only be appropriately taught in a school for the deaf.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total
2	1	....	....	3

TABLE III.—(Continued).**PARTIALLY DEAF CHILDREN.**

Children who can appropriately be taught in a school for the partially deaf.

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At Other Institutions	At no School or Institution	Total
....	1	1	2

MENTALLY DEFECTIVE CHILDREN.**FEEBLE-MINDED CHILDREN**

Mentally Defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for mentally defective children.

At Certified Schools for Mentally Defective Children	At Public Elementary Schools.	At other Institutions.	At no School or Institution	Total
18	1	1	20

EPILEPTIC CHILDREN.**CHILDREN SUFFERING FROM SEVERE EPILEPSY**

Children who are epileptic within the meaning of the Act, *i.e.*, children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary Public Elementary Schools.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions	At no School or Institution.	Total
....

TABLE III.—(Continued).**PHYSICALLY DEFECTIVE CHILDREN.**

Physically Defective children are children who, by reason of physical defect, are incapable of receiving proper benefit from the instruction in the ordinary Public Elementary Schools, but are not incapable by reason of that defect of receiving benefit from instruction in Special Schools for physically defective children.

A. TUBERCULOUS CHILDREN

In this category are only cases diagnosed as tuberculous and requiring treatment for tuberculosis at a sanatorium, a dispensary, or elsewhere. Children suffering from crippling due to tuberculosis which is regarded as being no longer in need of treatment are recorded as crippled children, provided that the degree of crippling is such as to interfere materially with a child's normal mode of life. All other cases of tuberculosis regarded as being no longer in need of treatment are recorded as delicate children.

I. CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS.

(Including pleura and intra-thoracic glands)

At Certified Special Schools.	At Public Elemen- tary Schools †	At other Institu- tions	At no School or Institution	Total
....	1	1

II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS.

At Certified Special Schools	At Public Elemen- tary Schools †	At other Institution	At no School or Institution	Total
5	8	1	13	27

† Tuberculous children who are, or may be, a source of infection to others are promptly excluded from Public Elementary Schools.

B. DELICATE CHILDREN.

Children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School.

At Certified Special Schools.	At Public Elemen- tary Schools	At other Institu- tions.	At no School or Institution	Total
....	65	....	5	70

TABLE III.—(Continued).**C. CRIPPLED CHILDREN**

Children (other than those diagnosed as tuberculous and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life, *i.e.*, children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the School curriculum as gardening or forms of handwork usually engaged in by other children.

At Certified Special Schools.	At Public Elemen- tary Schools	At other Institu- tions	At no School or Institution	Total
1	20	9	30

D. CHILDREN WITH HEART DISEASE.

Children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School.

At Certified Special Schools.	At Public Elemen- tary Schools.	At other Institu- tions	At no School or Institution	Total
....	1	1

Number of Children Suffering from Multiple Defects.

Defect or Disease.	Boys	Girls
Organic Heart Disease and Severe Torticollis 1		
Feeble-minded and Blind 1		
Blind and Epileptic 1		
Feeble-minded and Crippled 1 1		
TOTAL 2 3		

Statement of the number of Children notified during the Year ended
 31st December, 1935, by the Local Education Authority to the
 Local Mental Deficiency Authority.

Total Number of Children notified — 6.

ANALYSIS OF THE ABOVE TOTAL.

DIAGNOSIS.	BOYS.	GIRLS.
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School :		
(a) Idiots .... .... ....	....	1
(b) Imbeciles .... .... ....	....	2
(c) Others	2	1
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :		
(a) Moral defectives .... .... ....	....	....
(b) Others .... .... ....	....	....
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16 .... .... ....	....	....
3. Feeble-minded children notified under Article 3, i.e., "special circumstances" cases	....	....
4. Children who in addition to being mentally defective were blind or deaf .... .... ....	....	....
GRAND TOTAL	2	4

**TABLE IV.—Return of Defects Treated during the Year ended
31st December, 1935**

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Group VI).

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during year.		
	Under the Authority's Scheme.	Otherwise	Total.
<i>Skin—</i>			
Ringworm—Scalp { X-ray treatment	3	3	6
Other	8	....	8
Ringworm—Body	15	....	15
Scabies	3	....	3
Impetigo	35	....	35
Other Skin Disease	253	....	253
<i>Minor Eye Defects</i> (External and other, but excluding cases falling in Group II).	139	....	139
Minor Nose, Throat & Ear Defects, &c.	145	....	145
Miscellaneous (e.g. Minor injuries, bruises, sores, chilblains, etc.)	829	4	833
TOTAL	1430	7	1437

TABLE IV.—(Continued).

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

DEFECT OR DISEASE	No. of Defects dealt with			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise	Total.
Errors of Refraction (including Squint)	518	....	....	518
Other Defect or Disease of the Eyes (excluding those recorded in Group I).	61	....	....	61
TOTAL	579	....	....	579

Total number of children for whom spectacles were prescribed :

- (a) Under the Authority's Scheme 299
- (b) Otherwise —

Total number of children who obtained or received spectacles :

- (a) Under the Authority's Scheme 268
- (b) Otherwise —

Group III.—Treatment of Defects of Nose and Throat

NUMBER OF DEFECTS.

Received Operative Treatment.

Under the Authority's Scheme, in Clinic or Hospital for :				By Private Practitioner or Hospital apart from the Authority's Scheme	Total				Received other forms of Treatment.	Total number Treated.	
(1)				(2)	(3)				(4)	(5)	
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)
....	1	61	6	....	....	....	....	1	61	6	120
(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.				(iv) Other defects of the nose and throat.							

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.
(iv) Other defects of the nose and throat.

TABLE IV.—Continued.
GROUP IV. — ORTHOPAEDIC AND POSTURAL DEFECTS.

	UNDER THE AUTHORITY'S SCHEME			OTHERWISE		Total Number treated.
	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	
Number of children treated.	10	60	60	60	60	60

TABLE IV.—(Continued)**Group V.—Dental Defects.**

(1) Number of Children who were :—

(i) Inspected by the Dentist :

Age	3	35	}	Total 2332
	4	116		
	5	236		
	6	241		
	7	292		
	8	284		
Routine Age Groups	9	276		
	10	212		
	11	215		
	12	160		
	13	142		
	14	109		
	15	14		
Specials	67
GRAND TOTAL	2399

(ii) Found to require treatment 1743

(iii) Actually treated 2580

(2) Half days devoted to : { Inspection 24 Treatment 399 } Total 423

(3) Attendances made by children for treatment 4935

(4) Fillings { Permanent teeth 452 Temporary teeth 25 } Total 477

(5) Extractions { Permanent teeth 361 Temporary teeth 2119 } Total 2480

(6) Administrations of general anæsthetics for extractions 9

(7) Other operations { Permanent teeth 851 Temporary teeth 6657 } Total 7508

TABLE IV—(Continued).**Group VI.—Uncleanliness and Verminous Conditions.**

(i)	Average number of visits per school made during the year by the School Nurses	....	....	8
(ii)	Total number of examinations of children in the Schools by School Nurses	....	....	21075
(iii)	Number of individual children found unclean	....	....	612
(iv)	Number of children cleansed under arrangements made by the Local Education Authority	....	....	324
(v)	Number of cases in which legal proceedings were taken : (a) Under the Education Act, 1921	....	....	Nil
	(b) Under School Attendance Byelaws	....	....	Nil

**TABLE V.—RETURN SHOWING DEFECTS TREATED AT MINOR
AILMENT CLINIC. YEAR ENDED 31st DECEMBER, 1935.**

DISEASE OR DEFECT	No. of Defects treated under Authority's Scheme.			No. of Defects remaining under treatment.	No. of attendances at Clinic	No. of consultations.
	From previous year	New	Total			
<i>Contagious Skin Diseases</i>						
Impetigo	1	35	35	35	....	123
Scabies ....	....	3	3	3	17	14
<i>Non-Contagious Skin :</i>						
Dermatitis ....	....	13	13	13	91	69
Eczema	4	4	8	7	291	114
Seborrhoea ....	....	8	8	8	40	31
Abscesses ....	....	6	6	6	21	21
Boils ....	....	23	23	22	128	118
Warts	2	34	36	35	200	53
Herpes	1	5	6	6	18	16
Acne ....	....	1	1	1	1	1
Urticaria ....	....	6	6	6	10	10
Psoriasis ....	....	1	1	1	1	1
Alopecia ....	....	5	5	4	13	13
Intertrigo	2	134	136	135	530	366
Other diseases ....	....	4	4	4	14	12
<i>Ear, Nose and Throat Diseases :</i>						
Glands ....	....	8	8	8	18	16
Rhinitis ....	....	4	4	4	6	6
Tonsillitis ....	....	84	84	84	88	88
Earache ....	....	1	1	1	4	4
Laryngitis ....	....	3	3	3	5	5
Other Diseases	1	44	45	45	102	101
<i>Wounds and Injuries :</i>						
Grazes ....	....	90	90	90	393	256
Injuries ....	....	56	56	56	200	186
Bites and Stings ....	....	21	21	21	51	44
Burns, Scalds, Cuts,&c. ....	....	59	59	59	344	199
Septic Sores	5	242	247	243	1239	705
Bruises and Sprains ....	....	47	47	47	147	126
Others	1	1	2	2	2	2
<i>External Eye Diseases :</i>						
Foreign Body ....	....	9	9	9	15	11
Stye	1	30	31	31	153	96
Blepharitis ....	....	13	13	12	90	78
Conjunctivitis	1	18	19	19	95	78
Corneal Ulcer ....	....	....	....	....	....	....
Corneal Opacity ....	....	2	2	2	3	3
Pink Eye ....	....	20	20	19	117	115
Other Diseases ....	....	45	45	45	109	94

TABLE V.—(Continued).

DISEASE OR DEFECT	No. of Defects treated under Authority's Scheme.			No. of Defects cured.	No. of Defects remaining under treatment.	No. of attendances at Clinic	No. of consultations.
	From previous year	New	Total				
<i>Infectious Diseases :</i>							
Chicken Pox	....	2	2	2	....	3	3
Whooping Cough	1	2	3	3	....	8	7
Diphtheria ....	....	7	7	7	....	9	9
Mumps ....	....	1	1	1	....	1	1
Scarlet Fever	....	5	5	5	....	5	5
Measles ....	....	7	7	7	....	8	8
<i>General :</i>							
Ill-health, &c.	3	153	156	153	3	301	273
TOTALS	23	1251	1277	1261	16	5074	3481

Total number of children treated—1157.

TABLE VI.—TREATMENT OF DEFECTS OF NOSE, THROAT AND EAR AT SPECIAL CLINIC.

DEFECTS.										DEFECTS (CONTINUED)			
No. of cases referred for treatment.	No. of consultations for treatment.	Ton-sils considerably enlarged.	Ton-sils considerably enlarged.	Ton-sils and Ade-noids	Ton-sils and Ade-noids	In-flamed Turbinates	Cervical and other Glands	Rhin-Spurs, Deflec-tions and obs-tructions.	Cleft Palate	Nasal and Aural Poly-pi.	Myrin-gitis Diseases and Mas-toid Perfor-ation of Mem-branes	Dis-charg-ing ears.	Furuncle in ear.
385	1217	1244	41	68	32	15	6	56	28	28	2	17	25
385	1217	1244	41	68	32	15	6	56	28	28	2	17	25
2	19	16	36	20	1	47	58	84	62	6	255	128	2

TABLE VII. ELECTRICAL IONISATION.

Number of cases referred for treatment	Number of Consultations.	Number of attendances for treatment	DEFECT		Number of cases still under treatment or observation	Number of cases for whom no report is available
			Ears.	Nose.		
4	9	9	4	...	1	3

TABLE VIII. TREATMENT OF RINGWORM.

Number of cases	New	Total	Number of consultations with Doctor	Number of attendances made by children at Clinic	Number of bacteriological examinations	Number of cases still under treatment		Number for which no report is available
						Attending School	Not attending School	
1	28	29	145	150	9	16	2....	....

TABLE IX. ELECTRICAL TREATMENT.

		Number of cases			Number of attendances for treatment.	Disease or Defect		
Boys		GIRLS		Total		Infantile Paralysis	Optic Nerve	Naevus
Old	New	Old	New					Chalazion
3	6	2	7	18	154	3	1	14
								1

TABLE X. SUMMARY OF SCHOOL ACCIDENTS WHICH OCCURRED DURING THE YEAR 1935.
(ELEMENTARY SCHOOL CHILDREN)

Number of cases		Total number of attendances made by children at Clinic.	Number of cases where treatment was completed at Clinic.	Number of X-ray exposures	Number of cases referred to Hospital or Private Practitioner for further treatment	Number of cases resulting in permanent disability.
Serious	Minor					
161	161	507	157	24	4	....
....					

NOTE.—Cases of simple fracture not resulting in permanent disability and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

**TABLE XI. SHOWING NUMBER OF CHILDREN DISCOVERED
AT ROUTINE INSPECTION WITH ENLARGEMENT OF THE
THYROID GLAND. — YEAR 1935.**

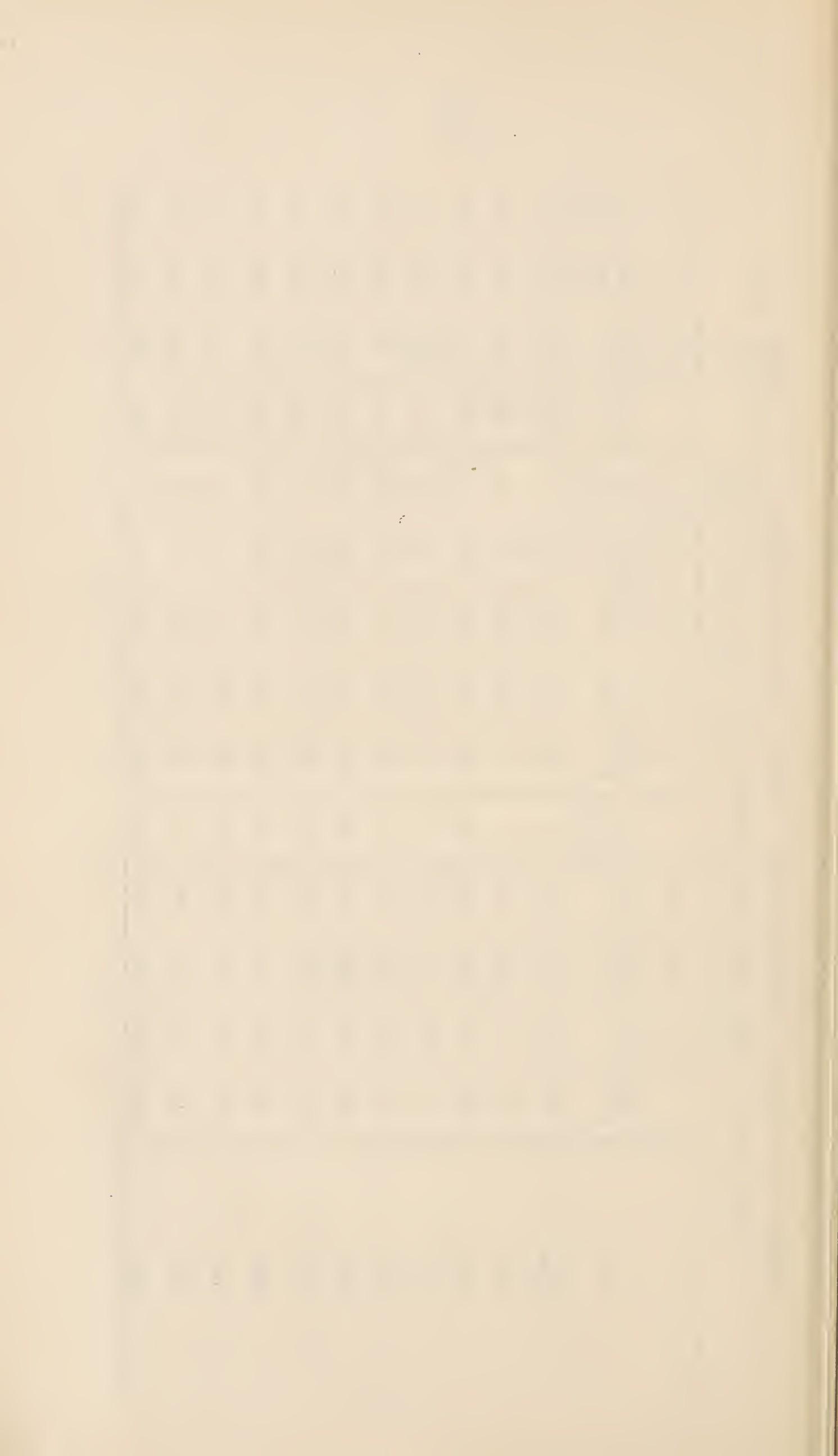
Group examined.	Number of children examined.			Number of children found with enlargement of the Thyroid Gland.		
	Boys	Girls	Total	Boys	Girls	Total
Entrants	406	407	813	....	....	....
Intermediates	462	431	893	....	4	4
Leavers	457	431	888	4	11	15
TOTAL	1325	1269	2594	4	15	19

TABLE XII. TREATMENT OF ENLARGED THYROID AT SPECIAL CLINIC.

Number of cases			Number of attendances for treatment.	Number of consultations	Number of cases cured.	Number of cases still under observation and treatment.
Old	New	Total				
23	11	34	120	110	22	12

TABLE XIII. RETURN OF ELEMENTARY SCHOOL CHILDREN MEDICALLY EXAMINED AND FOUND TO BE FULLY EFFICIENT DURING THE YEARS 1925 to 1935.

YEAR.	UPPER DEPARTMENTS				INFANT DEPARTMENTS				TOTALS				
	Efficient Boys		Defective Boys		Efficient Boys		Defective Boys		Effi-cient		Defec-tive		
	Efficient Boys	Girls	Defective Boys	Girls	Efficient Boys	Girls	Defective Boys	Girls	Effi-cient	Total exam-ined	% Effi-cient		
1925	428	398	457	499	46	294	278	387	329	44	1398	1672	3070
1926	393	318	287	248	57	345	336	273	257	56	1392	1065	2457
1927	553	635	373	471	58	321	344	259	242	57	1853	1345	3198
1928	785	633	532	513	58	367	394	342	267	56	2179	1654	3833
1929	474	361	291	257	60	213	202	152	117	60	1250	817	2067
1930	687	633	297	299	69	367	407	212	224	64	2094	1032	3126
1931	579	459	243	295	66	363	257	165	145	65	1658	848	2506
1932	687	572	240	211	74	356	344	93	73	81	1959	617	2576
1933	696	726	252	325	71	328	367	117	93	77	2117	787	2904
1934	725	579	244	268	72	327	381	108	76	79	2012	696	2708
1935	708	610	212	231	75	298	324	120	91	75	1940	654	2594



HIGHER EDUCATION.

Statistical Tables.

HIGHER EDUCATION.

TABLE I.—NUMBER OF CHILDREN ATTENDING THE SWINDON SECONDARY SCHOOLS INSPECTED DURING THE YEAR ENDED 31st DECEMBER, 1935.

A.—ROUTINE MEDICAL INSPECTIONS.

	AGE GROUPS.												TOTAL
	10	11	12	13	14	15	16	17	18	19	20	....
Boys	2	36	83	94	94	88	79	16	3	5	....	500	
Girls	1	32	67	74	62	56	36	6	2	2	....	338	
TOTALS	3	68	150	168	156	144	115	22	5	7	....	838	

B.—OTHER INSPECTIONS.

Number of Special Inspections .....	....	....	277
Number of Re-inspections .....	....	....	675
			952

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1935.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
	Number of Defects		Number of Defects	
	Requiring treatment.	Requiring to be kept under observation but not requiring treatm't	Requiring treatment.	Requiring to be kept under observation but not requiring treatm't
<i>Nutrition :</i>				
Poor	11	11	1	1
<i>Skin :</i>				
Seborrhoea	....	....	....	....
Other Diseases, Acne, etc., (non-Tuberculous)	3	....	3	....
<i>Eye :</i>				
Conjunctivitis	....	....	....	....
Blepharitis	5	....	....	....
Defective vision	54	10	7	....
Squint	....	....	1	....
Other conditions	3	4	1	....
<i>Ear :</i>				
Defective Hearing	2	6	....	....
Otitis Media	2	1	2	1
Other Ear Diseases	5	7	6	1
<i>Nose and Throat :</i>				
Adenoids	....	....	....	....
Enlarged Tonsils only	1	2	1	1
Enlarged Tonsils & Adenoids	....	....	1	....
Other conditions	6	5	5	6
<i>Glands :</i>				
Enlarged, Cervical and Sub-max : (non-Tuberculous)	....	....	1	1
Enlarged Thyroid	15	1	....	....
<i>Heart and Circulation :</i>				
Anaemia	1	1	....	....
Heart Disease—Functional	1	12	....	....
<i>Lungs :</i>				
Other Non-Tuberculous Diseases	....	1	1	....
<i>Nervous System :</i>				
Asthma	2	1	....	....
Overstrain	9	23	8	1
Other conditions	1	3	4	—
<i>Deformities :</i>				
Spinal Curvature	9	10	1	1
Posture	30	8	....	....
Flat Foot	27	10	....	....
Torticollis	....	....	....	....
Other Forms	10	9	18	14
<i>Other Defects or Diseases :</i>	3	19	89	8

TABLE III. SUMMARY OF ACCIDENTS WHICH OCCURRED TO SECONDARY SCHOOL CHILDREN DURING THE YEAR ENDED 31st DECEMBER, 1935.

Number of Cases.			Total number of attendances made by children at Clinic.	Number of cases where treatment was completed at Clinic.	Number of X-ray exposures	Number of cases referred to Hospital or Private Practitioner for further treatment	Number of cases resulting in permanent disability.
Serious	Minor	Total					
1	66	67	191	63	17	4	1

NOTE.—Cases of simple fracture not resulting in permanent disability and cuts requiring stitching, however extensive, so long as no permanent injury but a good scar resulted, are included as minor injuries.

**TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR
ENDED 31st DECEMBER, 1935.**

TREATMENT TABLE.

Group I.—Minor Ailments (excluding Uncleanliness)

DISEASE OR DEFECT.	Number of Defects treated or under treatment during the year.		
	Under the Authority's Scheme	Other- wise	Total
<i>Skin—</i>			
Impetigo	2	....	2
Other Skin Disease	7	....	7
Minor Eye Defects	8	....	8
Minor Ear Defects .. ....	....	....	....
Miscellaneous (e.g., minor injuries, bruises, sores, etc.)	90	....	90
TOTAL	107	....	107

TABLE IV.—(Continued).

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

DEFECT OR DISEASE	No. of Defects dealt with			Total.
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital apart from the Authority's Scheme.	Otherwise	
Errors of Refraction (including Squint)	158	....	....	158
Other Defect or Disease of the Eyes (excluding those recorded in Group I).	16	....	....	16
TOTAL	174	....	....	174

Total number of children for whom spectacles were prescribed :

(a) Under the Authority's Scheme ....	....	....	100
(b) Otherwise ....	....	....	—

Total number of children who obtained or received spectacles :

(a) Under the Authority's Scheme ....	....	....	97
(b) Otherwise ....	....	....	3

Group III.—Treatment of Defects of Nose and Throat

NUMBER OF DEFECTS.

Received Operative Treatment.				Received other forms of Treatment.	Total number Treated.	
Under the Authority's Scheme, in Clinic or Hospital for :		By Private Practitioner or Hospital apart from the Authority's Scheme				
(1)		(2)		(3)		
(i)	(ii)	(iii)	(iv)	(i)	(ii)	
....	1	4	....	....	10

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.
 (iv) Other defects of the nose and throat.

TABLE IV.—Continued.
GROUP IV. — ORTHOPAEDIC AND POSTURAL DEFECTS.

UNDER THE AUTHORITY'S SCHEME		OTHERWISE			Total Number treated.
Residential treatment with education	Non-residen- tial treatment at an orthopaedic clinic.	Residential treatment with education	Residential treatment without education	Non-residen- tial treatment at an orthopaedic clinic.	
2	16	....	....	16
Number of children treated.				

TABLE IV.—(Continued).**Group V.—Dental Defects.**

(1)	Number of children who were :—					
	(ii) Found to require treatment	....	....	....	....	—
	(iii) Actually treated	....	....	....	....	300
(2)	Half days devoted to : { Inspection — Treatment 108 }	Total	....	....	....	108
(3)	Attendances made by children for treatment	....	....	....	....	555
(4)	Fillings { Permanent teeth 358 } Total	....	....	....	....	358
(5)	Extractions { Permanent teeth 92 Temporary teeth 62 }	Total	....	....	....	154
(6)	Administrations of general anæsthetics for extractions	—				
(7)	Other operations { Permanent teeth 182 Temporary teeth 6 }	Total	....	....	....	188

**TABLE V. TREATMENT OF ENLARGED THYROID AT
SPECIAL CLINIC.**

Number of cases			Number of attendances for treatment	Number of consultations	Number of cases cured	Number of cases still under observation and treatment
Old	New	Total				
24	6	30	85	78	13	17

